The CHEMIST AND DRUGGIST

For Retailer, Wholesaler and Manufacturer

FEBRUARY 13 1960

NEW
TV
ADVERTISING
for
GLYMIEL JELLY



Sangers Ltd.

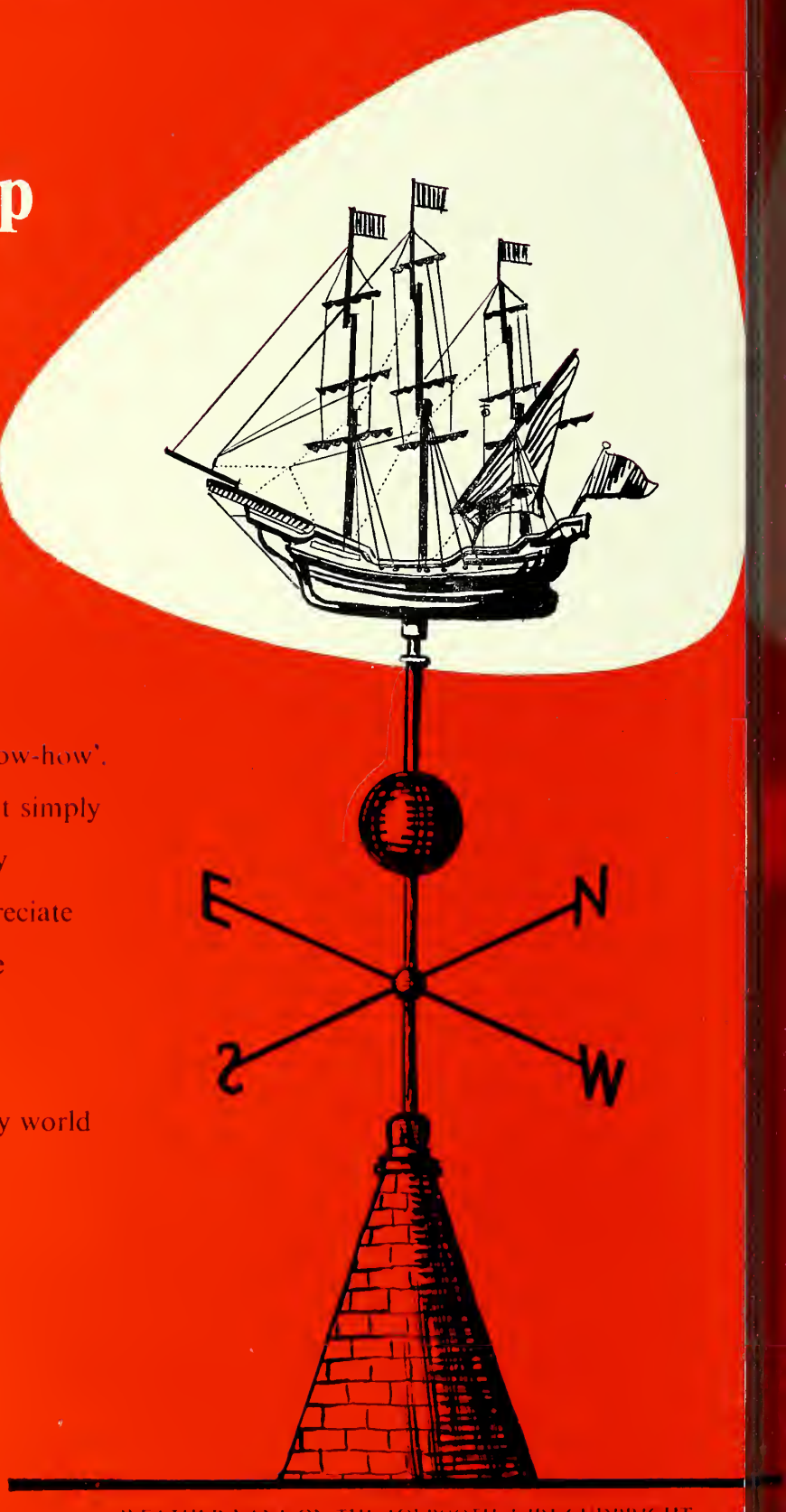
258 EUSTON ROAD, LONDON, N W 1
Branches—NEWCASTLE BRISTOL
and BEDFORD Telephone EUSton 5010
and ASSOCIATED COMPANIES

Time increased! Twice nightly spots
now one *30-Second* and one
15-Second weekly during the peak
Spring selling period!

Right at the top

as leading suppliers of

CODEINE



WEATHER-VANE ON THE TOLBOOTH KIRKCUDBRIGHT

The secret lies largely in production 'know-how'. Codeine Phosphate Special, Smith, is not simply a B.P. product dried down, it is specially prepared. Those who make tablets appreciate its stability and consistency. Large-scale production predicates ample stocks, ensuring prompt delivery at all times. These are some of the reasons why many world famous companies use it exclusively.

T & H SMITH LTD BLANDFIELD WORKS EDINBURGH

A BRITISH COMPANY ESTABLISHED IN EDINBURGH IN 1827

New Year

SUPER PLENAMINS

Rexall

The **ALL-IN-ONE** multi-vitamin and mineral tablet
10 vitamins * 9 minerals * liver concentrate

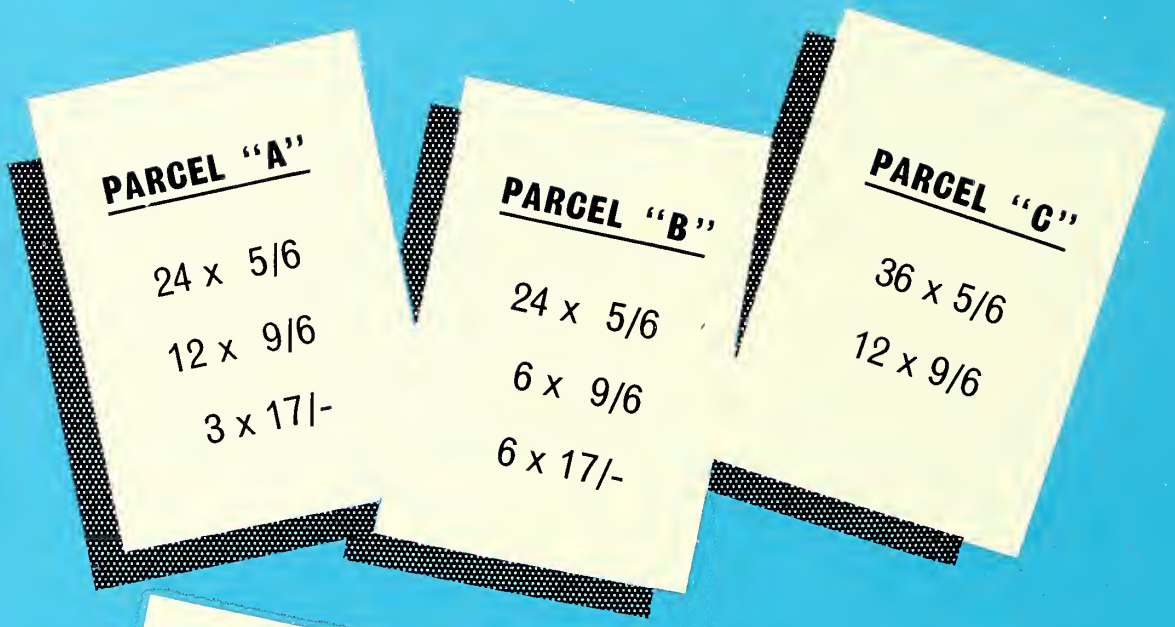
New Deal



43/- EXTRA PROFIT FOR YOU

(6 x 5/6d size free, plus 10% discount)

on each of these SUPER PLENAMINS parcels





OVER £7 PROFIT PER PARCEL!

NEW "FAMILY PACK!"

RETAIL PRICE **42/-**

YOUR PROFIT **14/-**

1 x 5/6 FREE WITH EACH FAMILY PACK

ORDER RIGHT AWAY—

DELIVERY RIGHT AWAY—

PROFIT RIGHT AWAY!

Rexall Drug Company Limited, Loughborough, England



We help create the sales

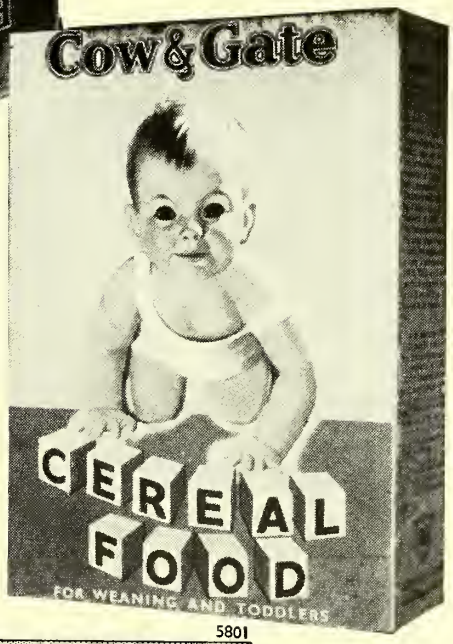
Don't disappoint your customers!

Cow & Gate products provide for mothers and mothers-to-be before and after Baby is born. By our established continuity of advertising in the National, Provincial Press and the use of full colour pages in the Magazine Press we help to bring customers to you. Make sure you are well stocked up to meet the ever increasing demand.

We shall be pleased to send you attractive display matter if you will let us know your requirements.

Please address your enquiries to

Cow & Gate Ltd. (Dept. C.D.) Guildford, Surrey.



5801

COW & GATE MILK FOOD

The FOOD of ROYAL BABIES

B

VICTOR FOX & JOHN RAMAGE

late of Clinical Products Ltd., invite enquiries for the manufacture and packaging of tablets (including strip packaging)

* *QUALITY*
* *ACCURACY*
* *PROMPT DELIVERY*

MEDOPHARMA LIMITED

158-162 Tooting High St., S.W.17
Telephone: BALham 2712

Now the weather's treacherous

PROVED AND SAFE

When customers ask for your advice, you're right and safe to recommend Besorbon. This remedy for colds has had a reputation for good results for over fifty years.

FREE DISPENSER

Order your Besorbon by the dozen and obtain the attractive counter unit free. By displaying Besorbon boldly now, you gain your full share of Extra Profits that would otherwise pass you by.

It's big selling for

BESORBON
REGD. TRADE MARK

MEDICINAL SNUFF

KEMSALES LTD. · EASTCHEAP · LONDON E.C.3

BURROUGH'S
ABSOLUTE ALCOHOL
JAMES BURROUGH LTD. 1 CALE DISTILLERY LONDON S.E.11

CHEMIST'S DICTIONARY OF MEDICAL TERMS 7th Edition

Prepared primarily for pharmacists, the Dictionary is indispensable also for pharmaceutical manufacturers, advertising agents concerned with the marketing of medicinal products and indeed all who have to find their way around among the multifarious medicinal compounds of modern times.

Order direct from: PRICE 17/6. Postage 9d.

THE CHEMIST & DRUGGIST
28 ESSEX STREET, STRAND, LONDON, W.C.2



Powerful advertisements on ITV and in the National Press are now continually appearing. **RESULTS DEPEND ON YOU! Stock** more Victory V . . . **Display** more Victory V . . . **Sell** more Victory V.

Display Victory V on your counter!
VICTORY FACTORIES, NELSON, LANCASHIRE.

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W. B. CARTWRIGHT OFFER

CETAL

ANALGESIC & ANTIPYRETIC

NON-SALICYLATE TABLETS

PRICES: TAX FREE

Bottle Size	Wholesale	Retail
20 Tablets	15/3 per doz.	1/11 ea.
40 Tablets	26/- per doz.	3/3 ea.



SPECIAL BONUS SHOWS 68% PROFIT ON OUTLAY

CETAL Tablets relieve headaches, period pains, migraine, colds and influenza, neuralgia, neuritis, rheumatism and sciatica.

CETAL Tablets are suitable for both adults and children. They are absorbed quickly and act rapidly. Safe for occasional or prolonged treatment.

CETAL Tablets are non-irritating, non constipating and show no adverse cardiac effects.

CETAL Tablets contain 0.5 Gramme Paracetamol.

DISPLAY BOX CONTAINING:

10 Bottles of 20 Tablets; 2 bottles of 40 Tablets

Retail Value..... **25/8**

Cost to Chemist..... **15/3**

Profit..... **10/5**

W. B. CARTWRIGHT LTD., Rawdon, Leeds

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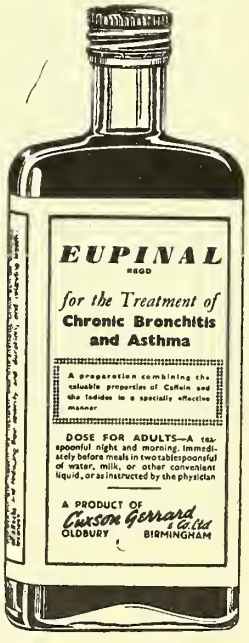
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For CHRONIC BRONCHITIS AND ASTHMA



Very profitable and regularly repeating counter sales can be built up with Eupinal, a line which has been successfully prescribed for many years.

We have received many letters of gratitude from sufferers who have obtained relief, and recommend you to feature this line prominently this Autumn and Winter.

Eupinal contains the valuable properties of Caffeine with those of Iodides in an effective and stable form, and is suitable for children and adults. It is not a sedative and contains no poisons. In addition to being safe, it is effective—relieving mild Broncho-spasm and acting as an expectorant, thus helping to check the course of the disease.

EUPINAL FROM CHEMISTS ONLY

4 ozs. TRADE: 28/- + 7/- P.T. Doz. Retail 4/2 each.
8 ozs. TRADE: 50/- + 12/6 P.T. Doz. Retail 7/4 each.
Also available with Ephedrine.

A PRODUCT OF Cuxson, Gerrard & Co. Ltd. OLDBURY, BIRMINGHAM

ONE OF THE MOST SPECTACULAR POST-WAR DEVELOPMENTS IN THE TREATMENT OF HAIR CONDITIONS—

deep

SHAMPOO TREATMENT

clears greasy hair

★ As advertised in leading women's magazines.



NATION-WIDE SALON SUCCESS!

Deep is based on a new formula of the Charles Bedeman Research Organisation. It is not just a shampoo but a shampoo treatment. It was arrived at after prolonged study of hair growth and continual examination of scalp disorders, particularly that of seborrhoea. This is a distressing state which lasts from puberty to middle age. Deep has proved completely successful in salons all over Britain. It goes from triumph to triumph in treating the all too common condition of greasy hair.

70% OF WOMEN HAVE GREASY HAIR!

DEEP is easy to use
DEEP is quick to take effect
DEEP is thorough in action

DEEP Shampoo Treatment — sensational!
Boxed 1 dozen at 10/- (Plus P.T.)
Resale 1/6 per sachet

CHARLES BEDEMAN LTD.
180 Queen's Road, London, S.E.15 Tel: New Cross 5755/5359/4836

C B

TIB 27

a COX product

a new, exclusive line with an exceptionally wide appeal



ZIM POCKET THROAT SPRAY

Non-irritant, bactericidal and bacteriostatic—specially formulated for common infections of the mouth and throat.

Available in attractively cartoned spray bottles at the following prices:

1 dozen 25/6
3 dozen @ 24/9 per doz.
12 dozen @ 24/- per doz.
} Exempt P.T.

Retails at 3/6 each · *send for sample*

ARTHUR H. COX & CO. LTD., BRIGHTON, ENGLAND

REG. TRADE MARK

Bocasan



nationally available NOW

the **NEW** nascent oxygen therapy
FOR THE TREATMENT OF PERIODONTAL CONDITIONS
with no side irritations. Ideal for home use

'Bocasan' is a completely stable compound ready for instant use, and safe therapy for prolonged treatment of buccal infections. Simply used as a mouthwash after meals and at bedtime, swishing thoroughly between the teeth. 'Bocasan' releases 5½ times more nascent oxygen than Sodium Perborate B.P.C. alone.

**** Twice Monthly Mailings to all Dentists***

'Bocasan' is distributed with literature to every dentist in the United Kingdom—developing a growing national demand on its effectiveness and the advice that 'Bocasan' is available at patients' local chemist. Stocks are available at your usual Wholesalers.

TWO 'BOCASAN' SIZES: Standard, 8 Sachets. Economy 20 Sachets

TRADE PRICES: (Hermetically sealed individual doses)

Retail Price incl. P.T.	Standard 4/9, Economy 9/9.
Trade Price per doz. excl. P.T. ...	Standard 36/-, Economy 73/6.
Purchase Tax per doz.	Standard 9/-, Economy 18/4.

KNOX LABORATORIES LTD., 46 HERTFORD ST., LONDON, W.1.



WITH A REGNA CASH REGISTER

Quick operation of a cash register during a busy period, in any type of business, is essential. The simple accuracy of a REGNA Cash Register plays a very important part in Assistant and Customer relationship. You can be certain that errors and miscalculations are cut down to an absolute minimum by using a REGNA — the Cash Register that pays for itself!

PRICES RANGE FROM £65
H.P. TERMS AVAILABLE.

Service throughout the U.K.
Electrical or hand operated machines available in Cream or Eau-de-nil finish.

THERE IS A REGNA ESPECIALLY DESIGNED FOR YOUR BUSINESS.

Post this Coupon NOW

MODEL No. M.659

**Note the ultra modern Streamline Styling.*

REGNA

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54 Commerce Street, Aberdeen.	*ABERDEEN 28496*
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14 Oxford Street, Newcastle-on-Tyne,	*NEWCASTLE 610078*
150 Mansfield Road, Nottingham.	*NOTTINGHAM 52340*
92 Easthill, Colchester.	*COLCHESTER 6872*
2 Glisson Road, Cambridge.	*CAMBRIDGE 59082 & 3*
42/43 Horsefair, Birmingham.	*BIRMINGHAM MIDLAND 1933*
71 Queen's Square, Bristol, 1.	*BRISTOL 28759*

TO THE REGNA CASH REGISTER COMPANY,
27 John Adam Street, London, W.C.2. *Tel: TRAfalgar 3351-4*

Please send, without obligation, illustrated multi-coloured leaflet together with full details of a REGNA for my business.

NAME.....

ADDRESS .....

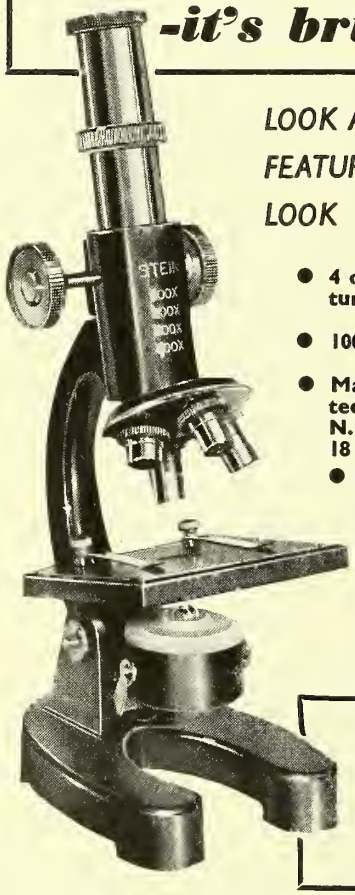
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And now, the new

"STEIN"

SELF-ILLUMINATING MICROSCOPE

-it's brilliant!



LOOK AT THESE FEATURES, THEN LOOK AT THE PRICE

- 4 objectives on rotating turret
- 100x, 200x, 300x, 400x
- Magnifications guaranteed in accordance with N.P.L. report F. 1626 of 18 · 8 · 59
- Reversible automatic light and mirror assembly
- 2 U.12 cells in base
- Fitted wooden case and 3 slides

RETAIL PRICE COMPLETE

£6.12.6

with batteries, bulb and case

A new "Stein" Microscope with the features of a professionally styled instrument plus the most ingenious illuminating method ever. Turn the mirror reflector over, and the fitted bulb lights automatically to spot-light the specimen being studied. With two standard batteries within the base, fitted wooden case and 3 plain slides this sales-compelling and very efficient microscope is going to make first-class business the year round.

Please order now for early February delivery. January quota sold.

- **Full trade discounts**
- **Enquiries from wholesale houses invited**
- ***Leaflets and display cards available***

PURSER'S LONDON (HOLBORN) LTD

12, FULWOOD PLACE, LONDON, W.C.1

Telephone : HOLborn 5268

With PURSER'S POSTAL SUNGLASS SERVICE

you get

★ **3 COMPLETELY EXCLUSIVE STYLES BY LEADING AUSTRIAN DESIGNER**

★ **PICK OF THE PACKS BY BARNET, BARTEX, JAMESON, POLAROID, WHITECROSS**

★ **DEPENDABLE VOUCHER REPAIR SERVICE**

★ **GENEROUS DISCOUNTS**

ORDER COUPON BRINGS SAMPLES ON APPROVAL WITHIN YOUR PRICE REQUIREMENTS. THEN ORDER AT YOUR CONVENIENCE FOR FIRM FORWARD DELIVERY

TO PURSER'S LONDON (HOLBORN) LTD., 12 FULWOOD PLACE, LONDON W.C.1.

Please send 1960 sample range of sunglasses on approval, in following price ranges.

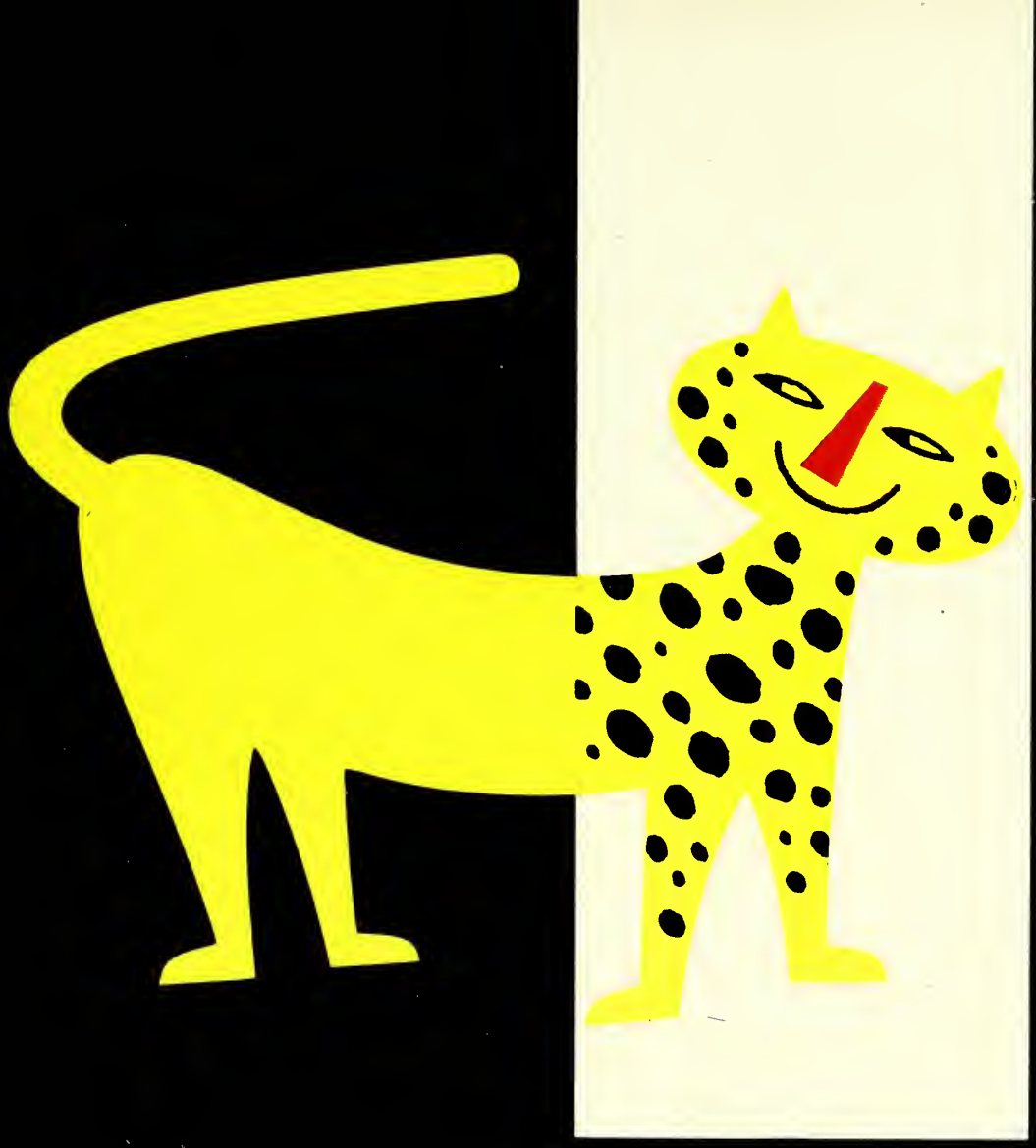
Top Quality ..... **Medium Price** ..... **Popular price** .....
(Mark off as required)

.....

.....

.....

ALSO DETAILS OF MICROSCOPE ..... *Mark with X if required*



Sensational new
anti-spot treatment

sentor...



American success

Wonderful anti-spo

revolutionar

PRE-VIEW SALES PROVE SENTOR A WINNER IN ENGLAND TOO!

In January sensational response to advance direct selling campaign *proved* that Sentor has a ready market! Advertisements in the National Women's magazines and Teenage press pulled a tremendous response from girls *and* boys, women *and* men.

FOUR SPECIAL INGREDIENTS

Allantoin · Sulphur · Resorcinol · Hexachlorophane

Never before have these four medicating ingredients been available in this convenient form—an American specialist's prescription that hides spots and helps skin heal naturally without a scar.

DAB SENTOR ON— SPOTS GONE!

s comes to England!

nd acne treatment in the
arry around stick



sentor 4/-

conceals as it helps heal

IG SPACES
IKE THIS
N THE
DAILY
MIRROR
AND 7
OTHER
NATIONAL
PAPERS







NOW!

COVER-THE-COUNTRY ADVERTISING STARTS MARCH 12th

T.V. on every station!

BIG PRESS SPACES

—in mass-circulation publications appealing to women and men—including Reveille, Woman's Realm and Daily Mirro

—in the hard hitting teenage press including Marilyn, Valentine, Roxy and the two new magazines—Date and Marty.

special introductory offer details overleaf

sentor RETURNS BIG PROFITS FROM ONLY 10 INCHES OF COUNTER SPACE

This eye catching display-outer holds 24 Sentor sticks and takes up only 10" x 3"



SPECIAL INTRODUCTORY OFFER...
YOURS FOR 8 WEEKS ONLY

2 Free Sticks on every 2 dozen you order!

Special introductory price **£3.4.2** (inc. P.T.) per outer containing two dozen sticks

Your bonus profit £1.11.10

(Normal trade price will be **£3.8.9** (inc. P.T.) per outer containing two dozen sticks.)

STOCK UP NOW

Advertising starts March 12th—use this order form, or write to Smith & Nephew Ltd., for further details.

ORDER CARD

To: Smith & Nephew Ltd.,
Bessemer Road, Welwyn Garden City, Hertfordshire.

Please send me.... packs each containing 2 dozen sticks of Sentor, at the special introductory price.

NAME.....

ADDRESS.....

.....

FIX YOUR BOTTLE LABEL HERE

LOOK

---------- MOTHAK FLY SPRAY

now only 3/9

super economy size *only* 6/3

—a saving of 1/3!

and the NEW

MOTHAK MOTH PROOFER

also 3/9

You've been asking for a MOTHAK MOTH PROOFER— here it is, by the EXPERTS!

Lowest prices!

Biggest profits!

Don't miss the special BONUS OFFER on all our products

THOMPSON & CAPPER LTD., LIVERPOOL 24

D

Stock up now!

WITH

STAINLESS
SWORD-EDGE

THE 10 DAY BLADE

★ Ten days superlative shaving from each blade

★ Stainless, cannot rust

★ No wiping, no cut towels

★ Build up your stocks of Sword Edge, the blade with all the benefits

8 3/4 D. PROFIT ON EACH

BY APPOINTMENT TO H.M. QUEEN ELIZABETH II SWORD CUTLERS

WILKINSON SWORD

NATIONAL ADVERTISING CAMPAIGN begins in MARCH in...

THE DAILY EXPRESS

THE DAILY MAIL

THE DAILY MIRROR

Throughout 1960, men in their millions will be reading about Sword-Edge, The Ten Day Blade. This is the most powerful selling campaign ever planned for a Sword-Edge. It will create a nation-wide demand for Sword-Edge dispensers. Be ready for it. Retailers contact your wholesalers . . . Wholesalers 'phone or write to Wilkinson Sword Limited, London, W.4.

Sword-Edge fit all Standard double-edge razors.



DISPENSER

WILKINSON SWORD LIMITED, LONDON, W.4



This up-to-the minute magazine

CAN HELP *YOUR* PERFUMERY SALES

" Fragrance Fashion " is specially written by experts to help your sales staff in the art of selling perfume and allied products. Published every two months by the Fragrance Bureau, " Fragrance Fashion " contains up-to-the-minute information on all that's new in the perfumery trade.

FREE TO SUBSCRIBERS!

Every subscriber gets a free copy of the " Perfume Glossary " (Completely revised 3rd Edition, just published).

CONTENTS INCLUDE

Latest products. News about people.
Feature articles. Selling points.

ONLY 1 GUINEA PER ANNUM (6 ISSUES)

POST THIS COUPON TODAY *(Postage paid in U.K.)*

If you already subscribe, use the coupon to renew your subscription.

TO:
The Distribution Manager,
" Fragrance Fashion,"
The FRAGRANCE BUREAU LTD., 44, ALBEMARLE STREET, LONDON, W.I.

Please send me " Fragrance Fashion " for one year (6 issues) and a FREE COPY of the Perfume Glossary, 3rd Edition for which I enclose a cheque/postal order for £1 1s. 0d.

NAME .....

ADDRESS .....

..... **DATE** .....

JACKSON'S

CENTURION BRAND

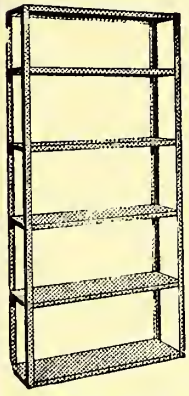
The Home of
MEDICINAL
PASTILLES & LOZENGES



ENQUIRIES INVITED

ERNEST JACKSON & CO. LTD. Manufacturing Chemists
CREDITON, DEVON
Established 1817

STEEL SHELVING



72" HIGH **34" WIDE** **12" DEEP**

- ★ Brand new — manufactured in our own works.
- ★ Shelves adjustable every inch.
- ★ Heavy gauge shelves will carry 400 lb. each.
- ★ Stove enamelled dark green.
- ★ 6 shelves per bay— Extra shelves 8/- each.
- ★ Quantity discounts.

DELIVERED FREE TO ENGLAND, SCOTLAND AND WALES

£3·15

Also available in White at £5 per bay

N·C·BROWN LTD

SHELVING DIVISION, HEYWOOD, LANCS. PHONE:- 69018 (6 lines)

BDH

THE BRITISH DRUG HOUSES LTD
and Associated Companies

now stock all

SHELL

GARDEN PRODUCTS

including Shell Aldrin, 5% DDT Dust,
Ant Doom, Shell 4% Malathion Dust,
Shell Derris Dust, Shell Zineb
in the handy

PUFFIT PACKS and BABY PUFFITS

together with a large and powerful range of
other Shell Garden Products—
Netelex, Dieldrin, Nitra-Shell Garden Fertiliser,
Slug Doom, Universal DNC Winter Wash,
Shell Tomato Set,
Liquila and Liquid Derris



UNIVERSAL GARDEN SUPPLIES LTD., Cambridge
Distributors for Shell Garden Products

The BEATSON Dispensing Service!



The Beatson range includes every container used in Pharmacy and large stocks are maintained in all types and finishes.

Dispatch can be made promptly from stock and all bottles are packed "production clean" in the Beatson Sealed Carton.

Be sure to specify BEATSON

"The Sign of a TRADE MARK REGISTERED *Good Bottle"*

BEATSON, CLARK & CO., LTD. · ROTHERHAM · YORKSHIRE

Glass Bottle Manufacturers since 1751

BC 83



And again, the need for Christy's Emulsion. Protective, soothing and healing on sore or exposed skins, Christy's Emulsion is widely known and trusted. As summer sunburn is followed by winter chapping and rawness, the demand for Christy's Emulsion continues to expand. To help meet this demand, see you have ample stocks of Christy's Emulsion.
Small bottle or tube retails at **2/3,** *large bottle at* **3/10.**

BIG NEW 1960 ADVERTISING CAMPAIGN

for Christy's Emulsion appearing in the gardening and farming press, and in Advertising Magazine programmes on Granada, Tyne-Tees, Anglia and Scottish Television.

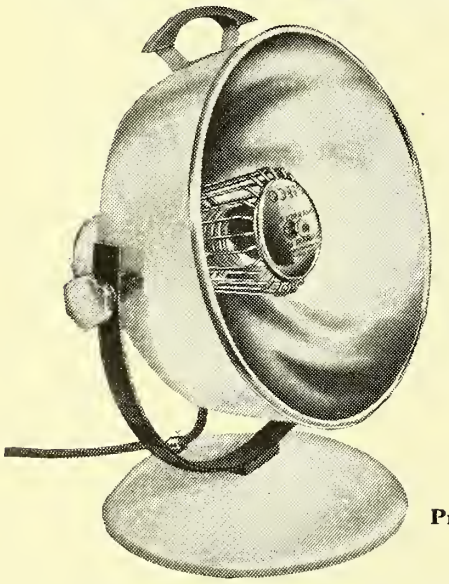


Christy's Emulsion

THOS. CHRISTY & Co. Limited, 152, NORTH LANE, ALDERSHOT, HANTS.

It's Cold! Damp! Foggy!
. . . your customers will welcome

the new PIFCO

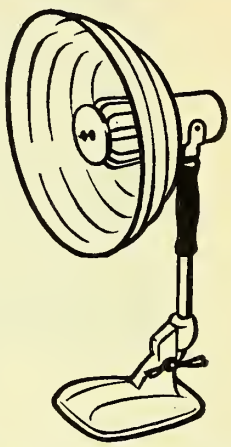


De-luxe model Infra-Red Lamp

Price 84/- Free of tax. Model 1027.

At this time of year, more and more people buy health lamps. And more and more doctors are prescribing them. That's why Pifco have brought out an entirely new model — the De-luxe Infra-Red — knowing for certain that it will become a best-seller. It is a table model, with a 10½" parabolic reflector, which swivels to direct the rays. It has a red stirrup with chrome-plated adjusting knobs, and a rigid cast base, finished in cream. Like all the other lamps in the Pifco range, it is highly efficient, strongly made and long-lasting. 450 Watts.

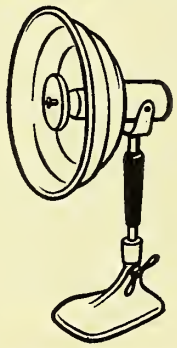
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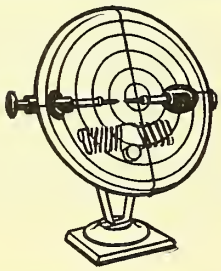
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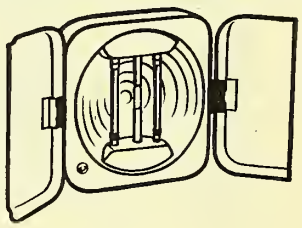
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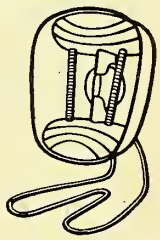
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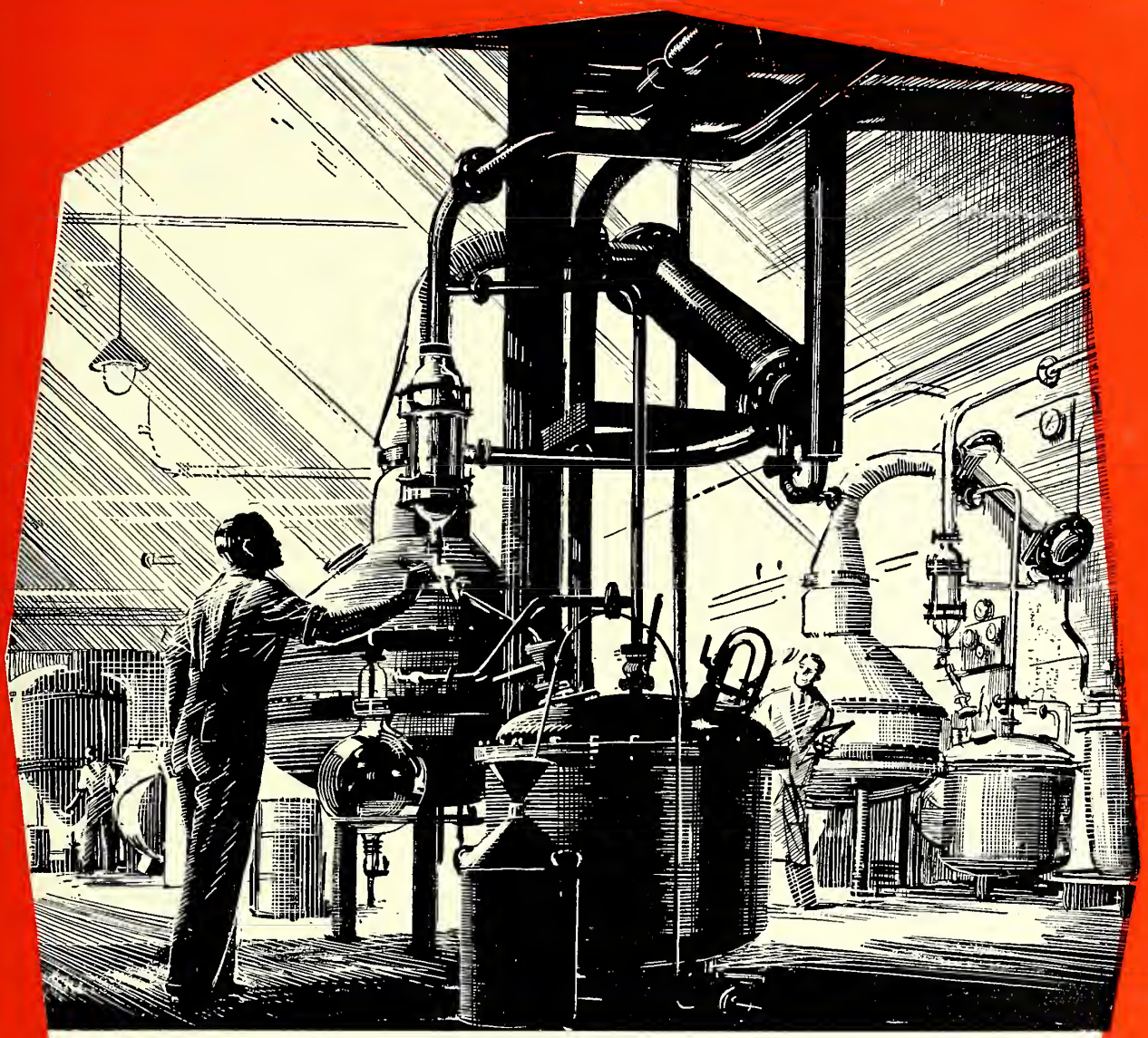
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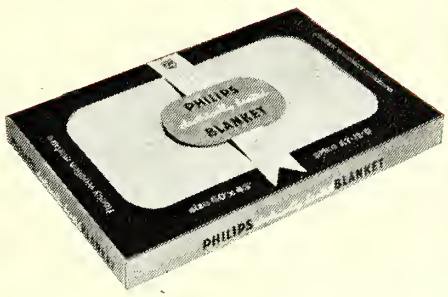
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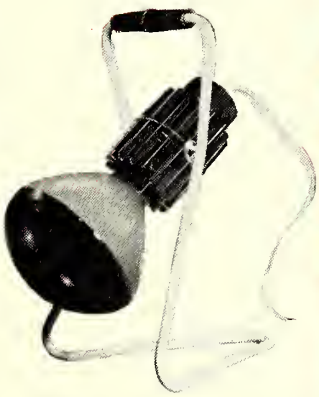
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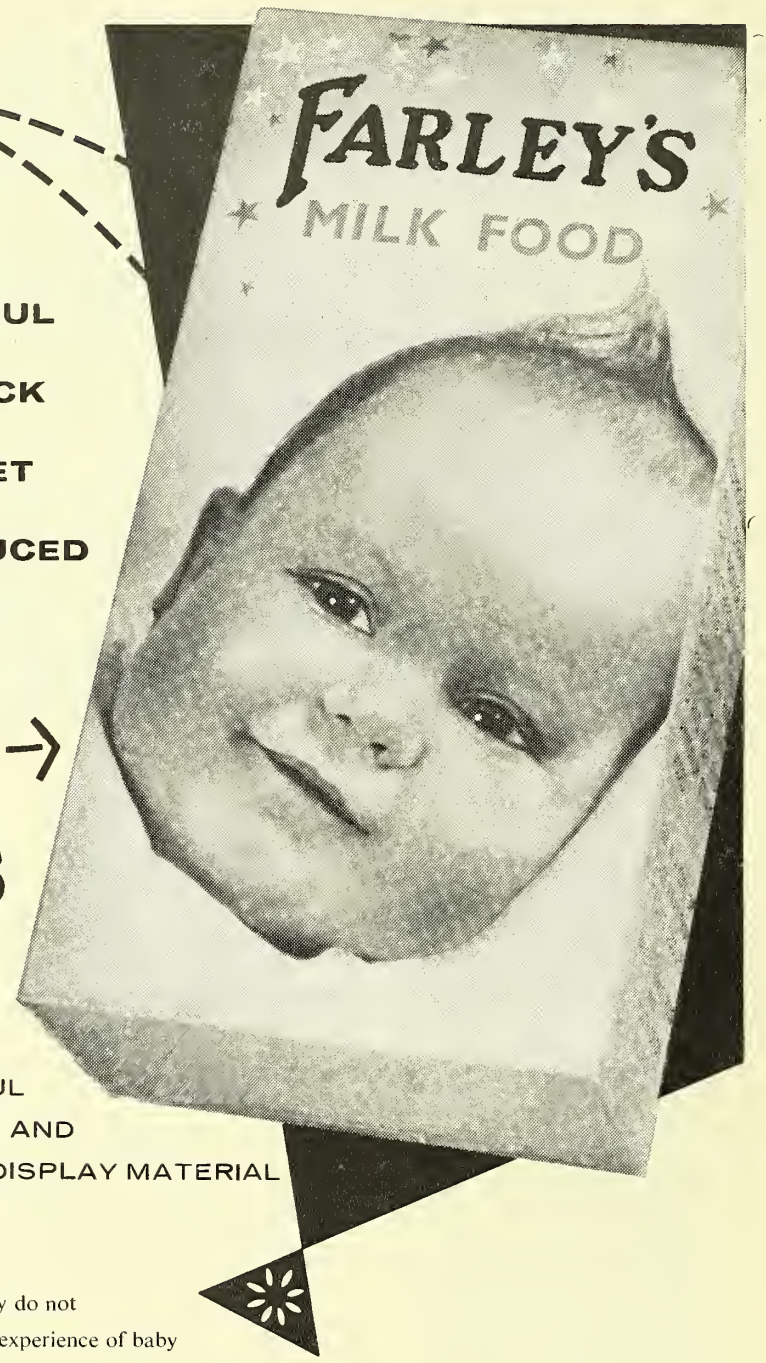
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Official organ of the Pharmaceutical Society of Ireland and the Pharmaceutical Society of Northern Ireland

Volume 173 February 13, 1960 No. 4174

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The CHEMIST AND DRUGGIST

Volume 173 FEBRUARY 13, 1960 No. 4174

Proposed Poisons Legislation

A SCHEDULE FOR C.N.S. AND OTHER DRUGS

THE Home Office has announced that Statutory Instruments are now being prepared to give effect to the following further changes in the Poisons List and Poisons Rules recommended to the Secretary of State by the Poisons Board:—

1. The following substances, recently controlled under the Dangerous Drugs Act, 1951, will be added to Part I of the Poisons List and the First Schedule to the Poisons Rules:—

Benzethidine; its salts
Dimenoxadole; its salts
Furethidine; its salts
Norcodeine; its salts
Normorphine; its salts
Phenazocine; its salts

2. The following substances will be added to Part I of the Poisons List and the First and Fourth Schedules to the Poisons Rules:—

Cyclophosphamide; its salts
Mannomustine; its salts

3. The Poisons Rules will be amended to provide for restrictions on the following substances on the lines of those applied to the substances in the Fourth Schedule but—

(i) Of the provisions relating to the form of prescription, only those in sub-paragraph (a) of paragraph (3) of Rule 12 will be applied; and

(ii) the provisions of Section 18(1)(c)(iii) of the Pharmacy and Poisons Act and of Rule 20, relating to labelling with the word "poison" or other prescribed indication of the character of the article, will be dispensed with in respect of transactions exempted by Section 20 of the Act.

The substances are as follows (they will be added to Part I of the Poisons List)—

Acetylcarbromal
Androgenic and œstrogenic substances, the following:—
  Benzoestrol
  Steroid compounds with androgenic or œstrogenic activity; their esters
  Derivatives of stilbene, dibenzyl or naphthalene with œstrogenic activity; their esters
Azacyclonol; its salts
Benactyzine; its salts
3-Benzylhydrazinocarbonyl-5-methyl-*iso*-oxazole; its salts
Bromvaletone
Captodiame; its salts
Carbromal
2-*p*-Chlorophenyl-3-methylbutane-2:3-diol
Guaiphenesin
4-Hydroxymethyl-2:2-di*iso*propyl-1:3-dioxolan
Hydroxyzine; its salts
Imipramine; its salts
Mephenesin; its esters
Meprobamate
Metformin; its salts
Methocarbamol
α-Methyl-phenethylhydrazine; its salts
Methyl phenidate; its salts
Nialamide; its salts
Phenelzine; its salts
Phenformin; its salts
Phenmetrazine; its salts
Pipradrol; its salts
Rauwolfia, alkaloids of; their salts
Thalidomide; its salts
Zoxazolamine; its salts

4. The entry beginning "3-(10-Phenothiazinyl) propane" will be deleted from Part I of the Poisons List and the First and Fourth Schedules to the Poisons Rules, and the amended entry "*Phenothiazine, derivatives of; their salts; except promethazine; its salts; its molecular compounds*" will be added to Part I of the Poisons List and the new Schedule to the Poisons Rules. (In consequence of this amendment the items "Ethopropazine; its salts" and "Pecazine; its salts" will not now be included in Part I of the List and the First and Fourth Schedules, as previously proposed.)

5. The following items, which are already in Part I of the Poisons List, will be deleted from the First, Fourth and Seventh Schedules where they occur and be placed under the restrictions mentioned in paragraph 3 above.

Acetanilide; alkyl acetanilides
Amidopyrine; its salts; etc.
Benztropine; its salts
Beta-aminopropylbenzene; its salts; etc.
Methylpentynol; its esters and other derivatives
Para-aminobenzenesulphonamide; its salts; etc. (This entry in the new Schedule will provide for the same exceptions as are in the existing Fourth Schedule entry, slightly amended to cover "preparations for the prevention and treatment of diseases in poultry.")
Paramethadione
Phenetidylphenacetin
Phenylbutazone; its salts
Phenylethylhydantoin; its salts; etc.
Pituitary gland, the active principles of



Members of the Welsh Pharmaceutical Students' Association in the pharmaceutical packing department of Glaxo Laboratories, Ltd., when they visited the company's headquarters at Greenford, Middlesex, recently.

Sulphonal; alkyl sulphonals
Suprarenal gland, the active principles of; their salts
Thyroid gland, the active principles of; their salts
Tolbutamide
Tribromethyl alcohol
Troxidone

6. The entry "*Chlorpropamide; its salts*" will also be placed under the restrictions mentioned in paragraph 3 instead of those in the First and Fourth Schedules as previously proposed.

7 (a). The following substances will be added to the list of antihistamine substances in Part I of the Poisons List and the Third Schedule to the Poisons Rules:—

Buclizine
(*p*-Chlorophenylpyrid-2-ylmethyl)2-dimethylaminoethyl ether
1-(4-*p*-Chlorophenyl-3-phenyl-but-2-enyl)-pyrrolidine
Chlorpheniramine
Clemizole
Cyclizine
1-Dimethylamino-3-phenyl-3-(2-pyridyl)-propane
Diphenylpyraline
Doxylamine
Isothipendyl
Mebhydrolin
Meclozine
Thenalidine
Triprolidine

(b). The entry "Antihistamine substances, the following; etc." will be deleted from the First and Fourth Schedules to the Poisons Rules and the entry as amended at (a) above will be added to paragraph 1 of the Seventh Schedule, except in the case of preparations intended solely, and made up ready, for the prevention of motion sickness, which will be included in a new paragraph to the Seventh Schedule with the requirement that they should be labelled "*Caution. This may cause drowsiness.*"

8. The androgenic and œstrogenic substances mentioned in paragraph 3 above will be exempted from the provisions of the Act and Rules when in preparations intended for external application only or in animal feeding stuffs.

9. *p*-Tertiary butyl phenol and *p*-(1,1,3,3-tetramethylbutyl) phenol will be exempted from the provisions of the Act and Rules.

10. The existing exemption from the provisions of the Act and Rules in respect of solutions containing not more than 1 per cent. of fluoroacetamide or fluoroacetanilide and containing also acetamide and a bitter principle and a dye will be withdrawn, but such solutions will be excluded from the entry in the First Schedule relating to fluoroacetamide and fluoroacetanilide.

11. Rule 8 will be amended so as to extend to medicines supplied on and in accordance with prescriptions given by registered dentists the provisions of:—(i) proviso (a) to section 19(3) of the Act; and (ii) Rule 8(a)(ii).

12. Sub-paragraphs (d) and (e) of Rule 16(2) will be amended to require a certificate authorising the purchase of monofluoroacetic acid or its salts to specify the quantity of the poison authorised to be purchased, and the certificate to be retained by the seller.

13. Rule 22(3) will be amended by deletion of the words "(other than a substance included in the First Schedule to these Rules)."

14. Rule 7(3) will be amended by deleting sub-paragraph (c).

Synthetic Penicillins

T.S.A. CONTROL CONFIRMED

HAVING received advice, the Minister of Health states that the potassium salt of 6 - (alpha-phenoxypropionamido) penicillanic acid (marketed under the trade name Broxil), is covered by the definition of penicillin given in paragraph (1) of Part II of the Ninth Schedule to the Therapeutic Substances Regulation, 1952. The sale or supply of the substance is therefore subject to control under Part II of the Therapeutic Substances Act, 1956, and may be sold or supplied to members of the public only by a duly qualified medical practitioner, a registered dental practitioner, a registered veterinary surgeon or registered veterinary practitioner or by a registered pharmaceutical chemist or an authorised seller of poisons acting under the authority of a signed and dated prescription.

Scientific Apparatus

IMPORT DUTY TO BE RELAXED

IMPORT duty on some optical, scientific, and technical instruments and apparatus is relaxed in respect of goods ordered by a user on or after February 3. The Board of Trade will consider applications for the remission of duty on such goods if the amount of duty is £20 or more, instead of £50 or more as in the past year. Duty may be remitted if similar articles cannot for the time being be procured in the United Kingdom. The relaxation applies to optical, scientific, measuring and checking instruments and apparatus; apparatus based on the use of *x*-rays or of the radiations from radio-active substances, thermionic, cold-cathode and photocathode valves and tubes; and discharge lamps.

Rating of Machinery

NEW LIST EFFECTIVE APRIL 1

A REVISED list of plant and machinery liable for rates effective on April 1, is appended to the Plant and Machinery (Rating) Order, 1960. It applies to England and Wales and consists, with modifications, of the list recommended by the committee under the chairmanship of Sir Edward Ritson.

IRISH NEWS

THE NORTH

Ulster Chemists

MONTHLY MEETING OF EXECUTIVE

THE executive committee of the Ulster Chemists' Association at its meeting in Belfast on February 2, acceded to a request from the associates' section for a meeting of the Joint Council to discuss five points raised at the section's annual meeting. The points were that there should be 1, an addition to rule 3 so that full-time students of pharmaceutics at Queen's University should be eligible to become associates of the association; 2, a forty-hour working week; 3, an increase in rota payment; 4, an increase in wages scale for certain categories; and 5, that the heading "Minimum Wages Scale" should appear in large letters on the U.C.A. Wages Scale. Mr. W. J. Moffett (president) was in the chair. The secretary reported that she had written to the Northern Ireland Members of the Imperial Parliament concerning the threat to price maintenance by the British Government's consideration of the possibility of repealing Section 25 of the Restrictive Trade Practices Act. She had also been informed of similar action being taken by many members of the Association, and numerous small traders who were concerned at the proposed action because, they considered, such a step could only result in great hardship to the distributive trade and employees, and create greater monopolies. In all cases the Members of Parliament had replied that they had passed the letters to the President of the Board of Trade. Mr. Moffett stated that the Proprietary Articles Trade Association had asked if the U.C.A. would encourage members to join P.A.T.A. and it was agreed that propaganda material for that Association should be sent to members. The secretary reported that sanction had been given by the Northern Ireland General Health Services Board to a number of chemists to close for a holiday on St. Patrick's Day. She also reported that some members were not charging a dispensing fee on private prescriptions and were also failing to code some of them. She was accordingly instructed to draw the attention of members to that. Strong disapproval was expressed of the practice of a few members on rota service failing to close at the normal closing hour but instead remaining open right through until the end of the rota hour. It was pointed out that the rota service was arranged so that urgent prescriptions could be dispensed after surgery hours, while at the same time reasonable shop hours could be observed. A long and hard battle had been fought to procure shorter hours and if such practices spread it would be only too easy to slip back into the long hours again, which no reasonable-minded person would wish to see. The following were elected to membership:—Mr. T. G. Eakin, Rathkain Villas, Dundonald, Belfast (successor to Messrs. N. S. Dalzell, Ltd.); Mr. W. J. Warnock, 23 Sloan Street, Lisburn; and two employees whose applications had been approved by the committee of the associates' section were elected to associateship. It was arranged to hold a whist drive on March 16, in aid of the Northern Ireland Chemists' Benevolent Fund.

Also present were Miss C. E. Culbert, Messrs. J. C. Acheson, H. S. Anderson, N. A. J. Anderson, W. H. Boyd, J. A. Brown, H. G. Campbell, H. Donaghey, H. W. Gamble, R. Gibson, T. A. Gibson, W. L. McDonnell, R. A. McEwen, J. K. McGregor, M. C. Mooney, W. J. Rankin (treasurer), C. L. G. Rattie, A. Steede, A. Templeton and J. C. Wellwood. Apologies for absence were received from Miss C. B. Abernethy, Messrs. J. Caldwell, W. R. McNabb and C. A. Quinn.

IRISH BREVITIES

THE REPUBLIC

MR. D. H. Earle, M.Sc., Dublin, has been appointed State chemist in succession to Mr. J. Kearns, who has retired. For the past eight years Mr. Earle has been assistant State chemist and State analyst.

A FURTHER adjournment of a fortnight was granted at the resumed hearing, in Dublin District Court on January 28, of summonses against Miss M. Toomey, owner of a pharmacy in Great Denmark Street, Dublin. The adjournment is to enable Miss Toomey to complete the sale of the pharmacy (see *C. & D.*, December 26, 1959, p. 574).

A MOTION "That science has done more good than harm for civilisation" was carried at a debate under the auspices of the Chemists' Debating Society at the College of Pharmacy, Dublin, on January 20. The motion was moved by a group of overseas students, and opposed by a team of Irish students. The next meeting is to be held on February 29 when Mr. M. Tobin is to speak on "The Theatre."

EXAMINATIONS for qualification to register as either ophthalmic or dispensing opticians are being held in Dublin on February 26. The examinations are in connection with the Opticians' Act, 1956, and are limited to candidates who can show that during the period 1951–56 they practised optics to a specified extent. Since December last it has been an offence to practice as an optician if not registered, or if not a registered medical practitioner.

NEWS IN BRIEF

MR. H. P. Barker has been elected chairman designate of the British Institute of Management.

DR. D. T. Lewis has been appointed Government Chemist with effect from April 1.

STATUTORY Instrument 1960, No. 136, effective February 3, provides that 6-norchlortetracycline hydrochloride be temporarily exempted from import duty until October 1.

THE prices of thirty drugs and preparations, as well as a number of items in Section IV of the Drug Tariff (Scotland) have been revised and are applicable as from February 1.

REDUCED working hours and increased salaries and wages have been introduced by Allen & Hanburys, Ltd. Entitlements to holidays have been increased and a system of graduated long-service awards inaugurated.

MORE than 2,000 tablets and ampoules of Dangerous Drugs were stolen from the pharmacy of Mr. C. Spencer, M.P.S., 121 Tottington Road, Elton, Bury, Lancs, on February 4. Later two men were arrested in connection with the theft.

MR. W. Sommerville Tait, M.P.S., D.B.A., Penicuik, has been co-opted to the Executive of the Scottish Department, filling a vacancy caused by the death of Mr. W. Spence Culbert, M.P.S., whose term of office, ending June 1961, he will complete.

TOPICAL REFLECTIONS

By Xrayser

Satisfactory packaging

There must, inevitably, be conflicting opinion in the matter of the presentation of drugs. Personal preference, habit and economics necessarily enter the picture. A reading of the illustrated articles devoted to the subject last week demonstrates the immense variety of containers from which it would be possible to make a selection that would provide the pharmacist with satisfaction and pleasure, and at the same time make some impact on the customer. It is unfortunate that there is a conflict, conducted at a level beyond the reach of the consumer, because the economic factor is one which cannot be ignored. In my personal view nothing is quite so suitable for tablets as a glass container, and many of those available are extremely attractive in appearance, as well as being thoroughly efficient. But it is of little consolation to the pharmacist using such containers when the official mind decides that, in general, the price for containers is too high, and a fraction of a penny must be lopped off. Presumably the decision is reached because of the widespread use of the skillet, and one would like to think that a discriminating public noticed the difference. It may not be necessary on every occasion to use a bottle, but where the tablet is one affected by climatic conditions—and more are so affected than otherwise—or where a course of treatment is prolonged, and large quantities are prescribed, common sense dictates that the container should last as long as the treatment. Standardisation is difficult, and not desirable, for uniformity detracts from the individual personal factor, but the training and experience of the pharmacist should ensure that on no occasion is an unsuitable container used.

Consumer reaction

Though the public do not, as a rule, make any comment on their dispensed medicines—apart from the cheerful suggestion that you have given them the "wrong" tablets, when in fact the doctor has changed the treatment deliberately or forgetfully, I have often wondered what their reaction might be to the removal of a plug of cotton wool from the inside of a tablet bottle, and what instrument they used for its extraction. I have also wondered, while realising its value as a protective, how arthritic fingers react to aluminium strip packaging, so often do we, in our own experience, find that appearance and protection of the contents of a bulk proprietary present us with a problem that might have taxed the ingenuity of the great Houdini, or the muscular superiority of Sandow. While indulging in feats of superhuman strength and muttering invocations to Jupiter, do we ever pause to consider whether we ourselves are not the authors of equally difficult problems in the next, or consumer stage, and whether somebody, somewhere, is at this very moment feeling just a little exasperated because the protective materials do in fact, resist attack.

"V"

There was a time, in my youth, when Victory V was on all the hoardings. At a later, and not very remote, stage the slogan was "V for Victory." Today, in pharmacy at least, V has acquired a totally different meaning, sometimes engendering a feeling more akin to defeat. Some of the antibiotics, with the march of time, have added a V to their title, and some have gone beyond that, so that we seem to be in the coding room of the Admiralty. In some examples the improved version has caught the doctor's fancy to the exclusion of the original, and stocks have been acquired to meet the latest advances in medical science. Then, for no apparent reason, the prescriber has reverted to his old ally—now out of date—giving it a "shot in the arm" and a new lease of life. "V" looks on pensively, and shortly goes out of date too. Broken bulk may be one of the hazards and heartbreaks of modern pharmacy, but the jilted make a voluminous, depressing and sad spectacle. Is there no possibility of damages for breach of promise?

TRADE NOTES

An Additional Size. — Boots Pure Drug Co., Ltd., Station Street, Nottingham, have added to their range a 150-mgm. strength of Melsedin tablets in tubes of twenty-five, 100 and 500.

Pack Redesigned. — E. Griffiths Hughes, Ltd., Adelphi, Salford, Manchester, have produced the redesigned



pack for their Tru-gel hair fixative here shown beneath its predecessor. The pack is manufactured by Universal Metal Products, Ltd., Salford.

Prices Reduced.—The Distillers Co. (Biochemicals), Ltd., Broadway House, The Broadway, Wimbledon, London, S.W.19, announce that Direma brand hydrochlorothiazide tablets are being reduced in price on February 15.

Tablet Manufacture and Packaging. —Medopharma, Ltd., 158 Tooting High Street, London, S.W.17, invite inquiries for the manufacture and packaging of tablets (including strip packaging).

Captions Transposed.—Captions for the illustrations of the Stabilec oven and the Bara incubator made by Baird & Tatlock (London), Ltd., Freshwater Road, Chadwell Heath, Essex, reproduced in the *C. & D.*, January 30, p. 113, were inadvertently transposed.

Now Tax-free. — ABBOTT LABORATORIES, LTD., 8 Baker Street, London, W.1, state that their specialities Tecaldrine cough syrup (list no. 6879), Tronothane cream topical anæsthetic (6645) and Tronothane jelly (6650) are now exempt from purchase tax.—FBA PHARMACEUTICALS, LTD., 37 Bedford Row, London, W.C.1, point out that their product Marbadal C is now exempt from purchase tax.

Discontinued. — ABBOTT LABORATORIES, LTD., 8 Baker Street, London, W.1, announce that Vi-Daylin compound vitamin drops (list No. 6331) are now no longer in production; no further stocks are available.—LEDERLE LABORATORIES division of Cyanamid of Great Britain, Ltd., Bush House, Aldwych, London, W.C.2, announce that Stresscaps brand vitamins (product number 4267–13) have been deleted from their catalogue.

In the Event of a Rail Strike.—West Pharmaceuticals, 9 Palmeira Mansions, Church Road, Hove, 3, Sussex, announce that if the threatened railway strike takes place, they are arranging for deliveries to be made by road. Normal delivery time of seven days for Cremalgin, Tabalgin and Parabal is expected to become extended to fourteen days. In Northern Ireland arrangements have been made with Thomas McMullan & Co., Ltd., to hold depôt stocks of the three products. Messrs. McMullan have undertaken to supply all wholesalers during a railway strike.

Change of Presentation.—The Ortho-Gynol and Ortho-creme sets and Ortho de-luxe kit of Ortho Pharmaceutical, Ltd., High Wycombe, Bucks, are being discontinued and replaced by a single Ortho set comprising a blue, washable plastic purse containing one Ortho vaginal diaphragm of appropriate size; one Ortho diaphragm introducer of the same size; and one 81-gm. tube of Ortho-Gynol vaginal jelly, fully packaged. Sizes remain as before (55-95 mm., in graduations of 5 mm.). The Ortho vaginal diaphragm is now available only in its own pack, in the Ortho duo-pack and in the Ortho set.

Distributors for the Manufacturers. —The British Drug Houses, Ltd., Graham Street, City Road, London, N.1, announce that since February 1 they have been distributing to chemists the whole of the Shell domestic horticultural products range. Stocks are being maintained in London and at the company's Liverpool and Nottingham depôts as well as by Rowland James, Ltd., Cardiff and Swansea. The range comprises Shell aldrin 5 per cent. DDT dust, "Ant Doom," 4 per cent. malathion dust, derris dust, Zineb in "puffit" and "baby puffit" packs, Netelex, dieldrin, nitra-Shell garden fertiliser, "Slug Doom," universal DNC winter wash, Shell tomato set, Liquila and liquid derris.

Bonus Offers

BURROUGHS WELLCOME & CO. (The Wellcome Foundation, Ltd.), 193 Euston Road, London, N.W.1. Marzine. Three doz. tubes invoiced thirteen to doz.; 6 doz. fourteen to doz.; twelve doz. fourteen to doz. (plus deferred payment terms). Till February 29.

W. B. CARTWRIGHT, LTD., Rawdon, Leeds. Cetal analgesic and antipyretic tablets. 68 per cent. profit on outlay on display box containing ten bottles of twenty and two bottles of forty tablets.

CULLINGFORD OF CHELSEA (Castle Soaps of Cambridge, Ltd.), Kirkby, Liverpool. Roto/Rotosan range of products. 2½ per cent. on 3 doz.; 5 per cent. on 6 doz.; 7½ per cent. on order for 12 doz. (any selection).

REXALL DRUG CO., LTD., Loughborough. Super Plenamins. Six 5s. 6d. size, plus 10 per cent. discount, on each of three bonus parcels (24 small, 12 medium, 3 large; 24 small, 6 medium, 6 large; 36 small and 12 medium).

SPA BRUSHES, LTD., Chesham, Bucks. Spa tooth-brushes (No. 4 shorthead and No. 5 longhead in both nylon (extra hard, hard and medium) and bristle (hard and medium)). 12½ per cent. discount on order for 3 doz. up to 11 doz. assorted and two free tooth-brushes for every doz. ordered. Retailers qualify for 10 per cent. discount on order for 12 doz. or over assorted tooth-brushes and six free tooth-brushes for every dozen. Brushes are dispatched in new counter displays, each holding 1 doz. tooth-brushes and bearing the slogan "Be true to your teeth or they'll be false to you." Postage and delivery charges are paid on all orders. Every customer ordering Spa No. 4 and No. 5 receives a free sample of the super-quality Spa "Bristle Number One" tooth-brush.

NEW PRODUCTS AND PACKS

Antibiotic Pastille. — Dales Pharmaceuticals, Ltd., Power Road, Chiswick, W.4, are marketing a new speciality Tyordac, a chewing-gum antibiotic pastille containing 5 mgm. of tyrothricin in each. The pack is a box of twelve. The outer contains eighteen cartons.

Antihypertensive Tablets.—Ismelin (2-perhydroazocin-1′-yl-ethyl-guanidinium sulphate), a new, potent antihypertensive, now commercially available from CIBA Laboratories, Ltd., Horsham, Sussex, is understood to be as potent as ganglion blocking agents, but to act selectively on the sympathetic nervous system. There is thus, the makers claim, no risk of constipation or paralytic ileus. Ismelin is available as 10- and 25-mgm. tablets in packings of twenty-five, 100, and 500. The 10-mgm. tablets are white, the 25-mgm. are pink.

Lotion as well as Ointment.—Burroughs Wellcome & Co., 183 Euston Road, London, N.W.1, announce that Cortisporin is now available as a lotion in addition to the ointment. It contains 5 mgm. of neomycin sulphate; 10,000 units of polymyxin B sulphate; and 10 mgm. hydrocortisone in each c.c. of aqueous vehicle. The lotion is available in plastic squeeze bottle of 10 c.c. Cortisporin lotion, which reduces inflammation provides an antibacterial range wide enough, it is claimed, to destroy virtually all the pathogens found in wounds and skin lesions. It is especially useful where there are moist abraded membranes.

Heat-sealed First-aid Dressings. — Safety First Aid Co., Ltd., 12 Duke Street, London, S.W.1, have produced, with the assistance of British Cellophane, Ltd., a novel first-aid dressings pack claimed to ensure "100 per cent. hygienic protection up to the moment of use." The dressings, in a range of sizes, are heat-sealed between two 5½ x 3½-in. sheets of Cellophane film that is perforated between them so as to allow the dressings to be detached one at a time while remaining film-wrapped. Two units, one containing six small and the other four large dressings, are marketed in a wallet of transparent plasticised polyvinyl chloride.

Teething Jelly. — Declared "not in any way an anæsthetic or mere soothing agent," a teething jelly issued as a supplementary product to Steedman's soothing powders by John Steedman & Co., 272 Walworth Road, London, S.E.17, contains dequaltinium chloride, 0·02 per cent.; ethyl nicotinate, 1 per cent.; and glycerin, 25 per cent. The jelly, say the makers, "may be confidently prescribed as a safeguard against thrush." The jelly is issued in pink and pale blue tube in red and pale blue carton of modern design. A composite mini-pack, also available, comprises thirty-six sets of three teething powders and 1 doz. teething jelly. In use, the jelly is gently massaged into the baby's gums.

Flexible Drinking Straw. — Hygienic Drinking Straws Co., Ltd., College Road, Fishponds, Bristol, are manufacturers of the Flex-Straw, a new drinking straw that bends to any angle. The straws are treated with a high-temperature resistant wax that prevents disintegration in broths, soups and other hot liquids.

Hair Colouriser. — Steiner, Ltd., Steiner House, Grosvenor Street, London, W.1, are marketing a new product, Glo-ahead hair colouriser, claimed to "foam beautifying, glowing colour into the hair" after a shampoo. Glo-ahead is available in golden brown, corn gold, auburn flame, copper leaf, fiery chestnut, silver ash, perfect pink, gun metal, ash brown and warm brown shades.

Eye Cosmetics.—Two new eye cosmetic preparations introduced by Jane Seymour, Ltd., 162 New Bond Street, London, W.1, are the "Wonder Look" mascara and eye-shadow palette and "Wonder" automatic eye pencil. Each palette has a combination of two shades of mascara and two shades of eye shadow (one for blue, one for brown and one for grey eyes). The eye pencil comes in five shades (blue, green, grey, light brown and blackish brown).

New Household Products.—Thompson & Capper, Ltd., Speke Hall Road, Liverpool, 24, have revised the formula and price of their Mothak fly spray so the product now gives a faster "knock-down." In addition to the standard size, a new "super economy" size containing 10 oz. has been introduced. The Mothak mothproofer, in aerosol container, has been produced specially for use in the moth-proofing of coats, suits and upholstery and is claimed to provide a long-lasting protection without fear of staining. Lavender-perfumed, it is available in the well-known Mothak colours, purple and yellow. In the Parador range is a new concentrated floral disinfectant each bottle of which is in a carton bearing a design in red and two shades of green emphasising the floral aspects of the concentrated disinfectant. Perfumes available are gardenia, lavender and "spring-time"; the outer contains six of each perfume.

Lipstick, Nail Lacquer and Puff.—Rimmel, Ltd., 146 New Bond Street, London, W.1, have added three new items to their "Beauty on a Budget" range. The first is "orange-ice" lipstick packed in a new type of container that features a golden cap and blue plastic base and is to be available in all shades in the range. The second is a matching "orange ice" nail lacquer. The third is a "twin" pair of washable velour power puffs designed to fit into the Rimmel compressed-powder plastic compact.

BRANCH EVENTS

EAST LONDON

Pharmacy as a Career

A NUMBER of grammar schools in the district had been notified, and there was a good attendance of fifth- and sixth-formers present at a recent meeting of the East Metropolitan Branch of the Pharmaceutical Society and the West Ham Association of Pharmacists when publicity was given to pharmacy as a career. MR. W. H. CLOUD, chairman, spoke on the many aspects of pharmacy open as a calling for young people, and this was followed by the film "Pharmacy for You," illustrating the training of a pharmacist from school days, through college and practical training, to eventual retail management. Then followed another film, "Living with Diabetes"—which showed just one of the many subjects with which a pharmacist had to be familiar. At the close of the meeting a discussion was held and leaflets concerning pharmacy were distributed to those requiring them.

WEMBLEY

A Colour Film

A SOUND and colour film "Diuretic Therapy with Saluric" was shown to members of the Wembley and District Chemists' Association on January 27. DR. CLAYTON gave a short address to explain the making of the film and later answered many questions. The film was devoted to the clinical applications of chlorothiazide when used as a diuretic in diseases of the cardio-vascular-renal system. MR. EVAN MEREDITH, in proposing a vote of thanks, said that members of the branch were grateful to Merck, Sharp & Dohme, Ltd., for producing the film and making it available. They also appreciated the way in which Dr. Clayton had freely given his spare time.

FINCHLEY

Dental Topics

A FILM show arranged by D. & W. Gibbs, Ltd., was screened by the Finchley Branch of the Pharmaceutical Society on January 18. The first, "Let's Keep Our Teeth," was made for showing at the Dental Congress held in London during 1952 and the second "A Tooth In Time" for the 1957 Congress held in Rome. The films showed causes of teeth decay in civilised communities compared with the absence of it in the more remote lives of the Eskimos. Within the second film was a "Noddy" feature, made specially for school children. After the showing, questions were answered by MR. EDDLESTON (London sales manager of the company), deputising for Mr. H. Colin Davis, dental surgeon, who was unavoidably absent. Questions veered from the technical to the commercial. MR. L. V. MELHUISH proposed a vote of thanks to Mr. Eddleston and to Messrs. Gibbs. He added an appreciation of Miss N. Jones, a committee member and staunch supporter of the branch, who was leaving the district.

ROMFORD

Generous Support for Charities

A DECISION by the committee of the Romford Branch of the Pharmaceutical Society to have no speeches at their annual dinner and dance on January 20 was rescinded in order to give proper publicity to the achievement of members in raising £82 for the Society's Birdsgrove House fund in response to an appeal by the previous chairman (Mr. John Harbour). The present branch chairman (MR. K. H. ROSE) made that disclosure in proposing the toast of the guests. It is understood that the proceeds are to be used to provide a washing machine for the convalescent home. Pharmaceutical charities further benefited by a raffle during the evening among the 200 diners and dancers. That realised for the Benevolent Fund a sum of over £30. MR. H. JARVIS GRAVES (a member of Council) acknowledged both contributions in his reply on behalf of the guests.

NORTH LONDON

An Advertising Plan for London?

A MEETING of chemists in the London area is being called to consider a possible advertising scheme. The secretary and one other member nominated by the local National Pharmaceutical Union branch will be invited to attend, and methods similar to those operated successfully in Barrow and Coventry will be considered. That was announced by the chairman of the North London Pharmaceutical Association (MR. J. F. JACK) at the Association's annual dinner in London on February 4. The intention was to meet, by co-operative action, a situation in which prescriptions were down by 10 million in a twelvemonth, profit margins were shrinking, and channels of distribution were widening. Mr. Jack was not pessimistic about the future. Let the N.P.U. formulate a policy that would command members' backing and pharmacy would achieve its rightful place in the forefront. Mr. Jack was proposing the toast "The National Pharmaceutical Union and other Guests." In his response, MR. G. T. M. DAVID (chairman, N.P.U. Executive) paid tribute to a North London member (Mr. Allen Aldington) for his efforts in fostering co-operation between the N.P.U. and the Pharmaceutical Society. A tombola organised during the evening enabled £35 to be contributed to the Pharmaceutical Society's Benevolent Fund. Dancing followed until midnight.

HOUNSLOW

Hazards of Unused Medicaments

PARKE, Davis & Co., Ltd., Hounslow, Middlesex, were hosts of the Hounslow Branch of the Pharmaceutical Society a few weeks ago when Dr. F. E. Camps, the Home Office pathologist, gave an illustrated lecture on "Medical Adventures and Misadventures." Dr. Camps referred at the beginning of his talk to the Academy of Forensic Sciences, a body recently organised to exchange the latest information between the various professional bodies interested in forensic matters. In the course of his lecture, Dr. Camps discussed many aspects of suicide, drawing particular attention to those that had a direct connection with pharmacy. His case histories illustrated the hazards of unused medicaments in the home; labels wrongly read or misinterpreted; and the possibilities of danger when potentially toxic and harmless materials were presented in closely similar forms.

MARRIAGES

NOLAN—COADY.—At the Church of the Holy Family, Dublin, recently, Thomas J. Nolan, M.P.S.I., James's Street, Westport, to Babs Coady, Main Street, Ferbane.

DEATHS

ABERNETHY. — On February 1, 1960, Mrs. Rebecca Abernethy, widow of the late Mr. Charles Abernethy, M.P.S.N.I., 480 Upper Newtownards Road, Belfast, 4. Mrs. Abernethy is survived by her daughter, Miss Cora Abernethy, M.P.S.N.I., who carries on the business established by her father at 232 Albertbridge Road, Belfast, 5.

ARTHUR.—Recently, Mr. Francis William Alexander John Arthur, M.P.S., 2 Heath Avenue, Lenzie, Glasgow. Mr. Arthur qualified in 1912.

BOWNESS.—Recently, Mr. Samuel Wesley Bowness, Hawes, Yorkshire, aged eighty-six. Mr. Bowness qualified as a chemist and druggist in 1895.

GALLOWAY. — On January 23, Mr. Alexander Shannon Galloway, M.P.S., 41 Beechfield Avenue, Blackpool. Mr. Galloway qualified in 1895.

MARSHALL.—On January 26, Miss Constance Frances Marshall, M.P.S., Waldersea, 86 Copers Cope Road, Beckenham, Kent. Miss Marshall qualified in 1919.

ROCK.—On January 21, Mr. Godfrey Henry Rock, M.P.S., 249 Dodworth Road, Barnsley, Yorks. Mr. Rock qualified in 1919.

WHYSALL.—Recently, Mr. George Ernest Whysall, M.P.S., formerly of 64 High Street, Grantham. Mr. Whysall, who qualified in 1898, became the proprietor in 1913 of the business his father had founded in Grantham in 1860.

PERSONALITIES

MR. J. C. HUGHES, M.P.S., The Cross, Lydney, Glos, has been appointed a justice of the peace. Mr. Hughes is a past-president of the Gloucestershire branch of the Pharmaceutical Society and a member of the Gloucester County and City Pharmaceutical Committee. He has been in business at Lydney since 1932.

MR. C. D. TURNER, M.P.S., 30 Cavendish Avenue, Allestree, nr. Derby, recently celebrated his ninetieth birthday. Mr. Turner qualified in 1894, and opened his own business in Derby in 1895. Later he opened a branch. Mr. Turner was for many years treasurer of the Derby Branch of the Pharmaceutical Society.

MR. HERBERT BROUGHTON, M.P.S., who has travelled for the past twenty years on the Humber ferry between his home at 21 Westfield Road, Barton-on-Humber and his pharmacy on Spring Bank, Hull, was somewhat surprised when the captain of the paddle steamer, on behalf of all the Humber ferry staff, made a presentation of a wall barometer to him on January 29. The ferry crews were showing their appreciation to Mr. Broughton as their most courteous passenger. Mr. Broughton has closed his business and retired.

COMPANY NEWS

Previous year's figures in parentheses

JOHN RONALDSON & CO., LTD. —Mr. S. R. Ashton has been appointed a director.

BEECHAM GROUP, LTD.—A second interim dividend of 8 per cent. (7 per cent.) on the issued Ordinary shares for the financial year ending March 31 is declared.

JOHN DALE, LTD.—Mr. B. L. Page has relinquished his executive appointment and has retired from the boards of directors of the company and its subsidiaries. Mr. Norman Draycott has been appointed a director of John Dale, Ltd.

SPRATT'S PATENT, LTD. — The company announce that Spillers, Ltd., are to make a cash offer for the Ordinary capital equivalent to 21s. 3d. per 5s. share at present in issue, involving a total of £3·4 millions. The board is considering the offer.

HILGER & WATTS, LTD.—Final dividend 10 per cent. making 15 per cent. (same, including special interim of 2 per cent.). One-for-five scrip issue and one-for-four "rights" issue at 21s. per 5s. share. Directors anticipate that they will be able to recommend dividends aggregating 15 per cent. on enlarged capital for current year. Net profit for year to September 30, £126,575 (£112,574), after tax of £109,385 (£113,376) and depreciation of £57,744 (£51,801).

ILFORD, LTD.—Final dividend is 12½ per cent. (11 per cent.) making 17½ per cent. for the year to October 31, 1959 (against 16 per cent). The company's turnover exceeded previous records, but increased costs, in particular on research, development and improved pension arrangements for employees, caused, compared with the previous year, a decrease in the parent's profit, before tax, from £1,612,499 to £1,518,305. Because of the reduction in the standard rate of income tax, the amount available for appropriation, including tax over-provisions and the balance brought in, is slightly increased from £983,556 to £1,053,251. Consolidated net profit, before tax, is £1,591,862 (£1,671,152) and the net profit, after tax and minority interests, is £857,911 (£788,994).

SANITAS TRUST, LTD.—At an extraordinary meeting on February 4, the chairman (Mr. C. Sweeney) said that sales to date compared favourably with last year and that in addition to developing sales of existing lines they hoped to acquire other businesses of a complementary nature. In that connection there were several interesting negotiations in hand. It was not the board's intention, Mr. Sweeny added, to issue any Ordinary shares for cash at the present time as the company had a very strong financial position. A resolution sub-dividing Ordinary shares from 10s. to 2s. was duly passed.

New Companies

P.C. = Private Company; R.O. = Registered Office

HILTINGBURY CHEMISTS, LTD. (P.C.).—Capital £2,000. To carry on the business of manufacturing and general chemists, etc. Directors: Kenneth J. Golds and Anthony C. D. C. Hannah, M.P.S. R.O.: 54 Hiltingbury Road, Chandlers Ford, Southampton.

E. G. WILLIAMS (CHEMISTS), LTD. (P.C.).—Capital £3,500. To carry on the business of chemists, druggists, etc. Subscribers: Edward G. Williams, M.P.S., and Dennis J. Appleton. Edward G. Williams is first and permanent director and chairman. R.O.: 14 Victoria Terrace, Leamington Spa, Warwicks.

BUSINESS CHANGES

BRADLEY PHARMACY, LTD., have opened a pharmacy at 39 Brocklesby Road, Grimsby.

BUCHAN (CHEMISTS), LTD., have opened a branch at 150 Green Lane, Castle Bromwich, Birmingham.

MR. J. TINEGATE, M.P.S., has acquired the pharmacy of H. R. Hoyles & Son, Fore Street, Wellington, Somerset.

HILTINGBURY CHEMISTS, LTD., have opened a pharmacy at 54 Hiltingbury Road, Chandler's Ford, Southampton.

MR. A. E. BRYANT, M.P.S., has taken over the pharmacy of J. C. Aitken, 462 Ashley Road, Parkstone, Dorset, from Mr. R. E. Frizzell, M.P.S.

BORAX CONSOLIDATED, LTD., Carlisle Place, London, S.W.1, have appointed Mr. G. N. Blow their Midlands area manager in succession to the late Mr. D. G. B. Sleath.

THE Promedico group of companies, which include Jean Sorelle, Ltd., have opened a branch factory at 47 Lloyd Baker Street, London, W.C.1. The headquarters remain at 21 Turle Road, N.4.

Appointments

GOLDEN, LTD., 7 Grosvenor Street, London, W.1, have appointed Mr. N. Culshaw their representative for Liverpool, West Lancashire, West Cheshire and North Wales.

MORNY, LTD., have appointed Mr. J. Todd, 10 Upper Wellington Road, Long Eaton, Notts, their representative for Norfolk, Suffolk, Rutland and the Shires of Bedford, Cambridge, Derby, Huntingdon, Leicester, Lincoln, Northampton and Nottingham.

EVANS MEDICAL, LTD., Speke, Liverpool, have transferred Mr. H. Cartwright (medical representative) to a Central London territory. Mr. W. G. Freeman has been appointed chemist-representative for North Lancashire and Westmorland; and Mr. W. P. Cawthorne, chemist representative for Northamptonshire, South Leicestershire and North Warwickshire.

ROUSSEL LABORATORIES, LTD., 847 Harrow Road, London, N.W.10, have promoted the following representatives to area managership: Mr. V. C. Allen (South-east and Southern England); Mr. J. G. Astbury (South Midlands and South Wales); and Mr. B. L. Williams (London and East Anglia). They will continue to call broadly upon the same customers as formerly at a rate commensurate with their new responsibilities.

IN PARLIAMENT

By a Member of the Press Gallery, House of Commons

IN a written answer to Mr. M. Lipton on February 4, Mr. R. A. Butler (Secretary of State, Home Department) stated he had received from the Poisons Board a report containing a recommendation that a number of substances including Preludin should be supplied only on prescription. Subject to the consideration of any representations of those concerned he proposed to accept the recommendation and to give it effect as soon as practicable. Mr. B. Janner asked the Minister of Health on February 8 if he was aware that Preludin and other sleeping draughts, tranquillisers, and slimming pills were still being sold without a doctor's prescription, sometimes with serious results; and what progress was being made by the Government in their consideration of that matter. In his reply Mr. Derek Walker-Smith (Minister of Health) referred to Mr. Butler's written reply. Mr. Janner then asked when the steps indicated in the reply would be taken to stop the sale of the drugs without the necessary doctor's certificate. Mr. Derek Walker-Smith reiterated that the Home Secretary had stated that he proposed to give effect to the recommendation as soon as practicable. Mr. Janner asked: "What is 'as soon as practicable'?" and was told he must ask the Home Secretary. Mr. Gresham Cooke said that while everybody agreed that drugs like Preludin should be made available only on prescription, would consideration be given to making available to the ordinary person without prescription the "fairly innocent carbromal drugs like Relaxa, Adalin, Persomnia and so on"? Mr. Derek Walker-Smith considered that implementation of the recommendations of the Poisons Board was definitely a question for the Home Secretary.

Shops Act

Mr. A. E. Cooper asked the Secretary of State for the Home Department what new legislation was proposed to amend the Shops Acts to bring them to accord with current needs. In a written reply on February 4, Mr. R. A. Butler stated he had no statement to make at present.

Trade Effluents

Asked by Mr. R. G. Page what action was proposed on the recent report of a subcommittee of the Central Advisory Water Committee (*C. & D.*, January 30, p. 112), Mr. H. Brooke (Minister of Housing and Local Government) in a written reply on February 4, stated that the first step was to consider any comments that interested bodies might wish to make on the general principles of the report, particularly bodies representing industry, the local authorities and the river boards. He hoped that any such comments would reach him promptly. He would study them as a matter of urgency.

Migraine Treatment

Mr. J. Rankin asked the Minister of Health on February 8 if he would appoint a committee to inquire into the cause and treatment of migraine.

Mr. Derek Walker-Smith said that migraine was a form of headache, and a good deal of research was in progress with a view to throwing light on the cause and treatment of the various forms of headache, but he did not think that that would be advanced by the appointment of a committee. Mr. Rankin asked if the Minister was aware that there were many people who rejected his statement that migraine was a severe form of headache and added, "Within my knowledge, medical men do not accept that view." There were 5 million people who suffered from that illness and there was no generally accepted treatment because nobody yet knew the cause. Would the Minister not think about his answer again and remit to an appropriate committee the business of trying to find out the cause of this illness? The Minister: "We must not fall into the error of thinking that the appointment of a committee is an automatic advancement of technical knowledge in these technical matters."

Oxygen Apparatus

When Mrs. B. A. Castle asked the Minister of Health on February 8 whether he would arrange for portable oxygen apparatus to be supplied under the National Health Service to sufferers from emphysema and other breathing troubles who needed the apparatus in order to enable them to take up employment, Miss Edith Pitt (Parliamentary Secretary, Ministry of Health) replied that arrangements already existed for the supply of the apparatus on loan to patients where the consultant considered it advisable. Mrs. Castle asked if in existing cases where the doctor had already prescribed oxygen apparatus for the use of a patient, but the apparatus was in a large non-portable form, the doctor could now prescribe the portable apparatus in its place? Miss Pitt replied that if by "doctor" the questioner meant a general practitioner, then it was not for the general practitioner to prescribe. It must be on the recommendation of a consultant. Mrs. Castle said doctors prescribed oxygen apparatus on their own authority but it was in a large cylinder. Why could they not substitute the portable apparatus that would enable people to work? Miss Pitt: "I am advised that only a small proportion of the people who suffer from breathlessness can profit by the use of this portable apparatus. Most people suffering from asthma and bronchitis are unsuitable and might even be harmed."

Toxic Agricultural Sprays

Mr. J. A. Farr asked the Minister of Agriculture, Fisheries and Food if the group of scientists appointed to examine the use of toxic sprays in agriculture had yet met; and when and in what form its report could be expected. Mr. John Hare (Minister of Agriculture) in a written reply on February 8 said that consultations about the membership of this group were practically completed and an announcement would be made shortly. He could not at that moment indicate when and in what form its report could be expected.

MORE FOR THE HEALTH SERVICE

Additional £5·9 millions for Pharmaceutical Services

THE largest single item in the Civil and Revenue Supplementary Estimates (H.M. Stationery Office, 9s. 6d.) is an additional £25·6 millions required to cover the increased cost of the National Health Service which brings the revised estimate for the cost of the National Health Service 1959-60 to £562,754,005.

There is a supplementary estimate of £5·9 millions for the Pharmaceutical Services attributable in England and Wales to an increase in the number of prescriptions and higher average costs. In Scotland the revision is stated to be required only because of an increase in the number of prescriptions. The details of the additional requirements for the Pharmaceutical Services are given in the accompanying tables. The General Hospital Services are expected to cost £17½ millions more than originally estimated because of salary and wage increases.

There is also a supplementary estimate of £1,578,200 for the purchase of poliomyelitis vaccine to meet increased demand in England and Wales.

Pharmaceutical Services 1959-60

Table 1	England £'000	Wales £'000	Scotland £'000
Original estimate	55,876	4,297	7,233
Revised estimate	61,188	4,669	7,478
Additional sum required	5,312	372	245

Table 2	England £'000	Wales £'000	Scotland £'000
Payments to pharmacists:			
Dispensing and rota fees	704	39	148
Ingredient cost and container allowance ...	3,936	280	162
Allowance for overheads and profit ...	961	70	37
Payments to medical and dental practitioners	302	18	—
	5,903	407	347
less payments by patients	591	35	102
	5,312	372	245

Correspondence

Chemists and the P.A.T.A.

SIR,—I was so impressed with the clear-cut, brief, down-to-earth statement of facts contained in the Proprietary Articles Trade Association leaflet "Pharmacists in Retail Business" that I wrote to the secretary of the P.A.T.A. and acquired twenty copies, posting a copy to each of this company's representatives. I feel that every manufacturer's representative in Great Britain calling on pharmacists should be equipped with a copy of the leaflet.

E. A. SHEPPARD,
BIOMETICA, LTD.,
Boreham Wood, Herts

An Unsafe Description

SIR,—At a recent meeting of a borough council's "Safety in the Home" committee, one of the doctors present suggested that pharmacists should discontinue the use of "The Linctus" when labelling dispensed medicines. In the public mind linctus has come to mean a safe, demulcent, syrupy, cough remedy, and the uninformed may so consider some the more potent preparations, especially when viewing a bottle which has rested for some time in the family medicine cupboard.

J. S. GRANT,
London, N.1

A Disclaimer

SIR,—In your issue of January 23, under "Medical Abstracts," you mention that British and American workers have reported that prochlorperazine was helpful in preventing migraine in children. I was the author indicated in that report by Professor Illingworth and, as you can see from the issue of the *Lancet* (January 30, p. 290), I never stated that Stemetil had any particular use generally in the treatment of migraine, and certainly not so far as children are concerned.

N. LEYTON (DR.),
10 Harley Street,
London, W.1

Word Perfect

SIR,—A "complete" prescription (for a change)—received today (N.H.S.):—

George ——
117 —— Road,
S.W.11

℞

Mist. Kaolin et morph.
(Kaolin and morphine mixture B.P.C., 12 x 1/65 gr. morphine)
6 fl. oz.
1 tablespoon to be taken 3 x day
.....

M.B., Ch.B.,
Locum to Dr. ——
3.2.59
IVOR RATTEE,
London, S.W.11

A Method of Price Maintenance

SIR,—It appears to me that, if manufacturers wish to preserve price maintenance, it is in their hands to do so, regardless of anything the Government may do. It would be necessary to stop staggering prices as to quantity, so as to put the one-man business on a par with emporiums, multiple shops, Co-operative societies, etc. Then a contract would be made with each buyer, stipulating that the price marked on the package would be charged, failing which supplies would be stopped. The wholesaler or recognised middle-man could receive his discount off the standard price.

H. LATTIMER,
Ewell, Epsom

First Commercial Phenol

SIR,—In a very interesting paragraph in your issue of February 6, about the election of Mr. H. W. Graesser-Thomas as Master of the Worshipful Company of Horners, it is suggested that Robert Graesser, Ltd., founded in 1867, were the first in the world to supply phenol on a commercial scale. I think that claim is a little doubtful, as by 1864 Dr. Frederick Crace Calvert was producing carbolic (probably 35's) at the rate of 15 tons per annum. On October 28, 1867, in a lecture to the Society for the Encouragement of National Industry in France, he described how a year previously he had been able to produce phenol crystallising at 41° C. Although Dr. Calvert used a lot of his own phenol production in the manufacture of sheep dips, soaps and tooth-powder, etc., there do appear to have been phenol sales as well. It is an interesting fact that R. Graesser, a Mr. Clift and the writer's grandfather, Charles Lowe, all worked with Dr. Calvert in the early 1860's. After Dr. Calvert's death in 1874 Charles Lowe bought the firm from Dr. Calvert's widow, and it has remained in the family ever since.

F. C. CALVERT & CO., LTD.,
C. F. P. LOWE, *Managing director*,
Manchester, 12

TWO STANDARDS OF MEASUREMENT

"Ex Cat. II" pharmacist criticises hospital points system

SIR,—Once more hospital pharmacists' salaries are "temporarily settled." The discussion of unjustifiable anomalies brought about by the pharmaceutical pointage system (set out in P.H. Circulars 7 (HMC 52) and 10), and its replacement by a just and adequate assessment of posts has, for reasons that are not known, been flatly rejected. The demand for a "temporary" but immediate increase of salaries by 25 per cent. has boiled down to an award of hardly more than 20 per cent., and it will, at £690 per annum, prove just as impossible to recruit basic-grade pharmacists as at £605. Unchanged remains the allowance for higher qualifications, while degrees are still, at £25 per annum, valued £5 higher than the Apothecaries' Hall certificate. Those are the negative results of the "temporary settlement" which became effective as from January 1, 1960, though administrative and clerical officers recently obtained salary increases which were back-dated many months. However, there is one success to record: Group responsibilities are no longer imposed upon Chief Pharmacists "free of charge," but are in future being rewarded according to "total points" under an assessment made in 1948. Chief Pharmacists, who have pioneered up to now an efficient pharmaceutical Group service within "small Cat. II Hospitals" (for example, Leavesden Hospital, nr. Watford, Herts, which, with its 2,300 beds for mental defectives, including 100 beds for tuberculosis patients, plus the approximately 300 beds for geriatrics patients at Abbots Langley Hospital, forms the mixed Leavesden Group, and was assessed in 1948 at 31·5 points, have "had it" not only so far as the previous Group responsibility is concerned, but also in respect of salary in Cat. II, because twelve pharmaceutical points do not now suffice in such a mixed Group with two pharmacy departments (Group Pharmacy and dispensary). More than 20 points would be required for the Group Chief Pharmacist to qualify for Cat. III according to PH Circulars 7 and 10. That is a Utopian and unreal figure, because an institution of that kind with approximately 4,000 beds simply does not exist in this country. Mental health at present holds top priority, but no one worries how or whether Management Committees can recruit experienced and suitable Chief Pharmacists adequately to co-ordinate matters. Deputy Chief Pharmacists coming from "larger" hospitals are penalised by retaining the same salary for a much greater responsibility should they venture to take over a Chief Pharmacist's post of that kind. But the mental hospital service is not alone in having its Pharmacists discriminated against. All specialised hospitals (childrens, orthopaedic, eye, skin, T.B.) are being usually graded in Cat. II, though a bed complement of 1,000 and more can hardly be said to render a hospital a "small" one. It is therefore, from every point of view, wrong to equate Deputy Chief Pharmacists' posts in larger hospitals with Chief Pharmacists' posts in the "smaller." It could be argued that the description "Chief Pharmacist" is not applicable to a (usually single-handed) pharmacist in charge of a Cat. I hospital pharmacy, but even that Chief Pharmacist carries the full burden of responsibility to the Management Committee, unlike Deputy Chief Pharmacists, who even when most fully extended, only *share* the Chief Pharmacist's responsibilities, are never burdened with Group responsibilities, and hardly with teaching at nurse's training schools. However, for the Group allowance, the "total pointage within the Group" is now decisive, yet salary is still determined in accordance with the anomalous principles of P.H. Circulars 7 and 10. Is it not time to put right this defect of measuring by two different yardsticks before calculating the well deserved responsibility allowance for Deputy Chief Pharmacist's and their equivalents, the Senior Pharmacists at Cat. III hospitals?

C. J. RAWSKI-CONROY

STATUTORY COMMITTEE

Four cases considered

FOUR cases were heard when the Statutory Committee of the Pharmaceutical Society met on February 3. The first was a resumed inquiry into the case of a pharmacist who previously appeared before the Committee on October 1, 1958 (*C. & D.*, November 15, 1958, p. 528) to answer information from which it appeared that in April of that year he had stolen £2 9s. 6d. from his employer. There was no conviction, but the pharmacist was placed on probation for two years as from April 28, 1958, and the inquiry was held on grounds of misconduct. Giving the decision on February 3 Sir David Cairns, Q.C. (chairman), regretted that, for reasons governing the Committee's business, there had been an unfortunate delay, and that the period since the original hearing had been about fifteen months instead of a year. The Committee, after having considered the reports that had been received from the superintendent pharmacist of the company now employing the pharmacist concerned, and of a letter from the probation officer, were prepared to say that no further action should be taken. Speaking to the pharmacist Sir David said "It was, I am sure, made abundantly clear to you when you were present before the Committee before, and I repeat it to you now, that any further offence of this kind would of course have serious consequences for you so far as your professional position is concerned. The Committee are satisfied that you have been on good behaviour during the past year, and we sincerely hope that you will continue to be on good behaviour at all times in the future. Accordingly, no direction will be given upon this reference."

No Action

The second case concerned a corporate body and was resumed from February 5, 1958 (*C. & D.*, February 15, 1958, p. 168). The company was represented by Mr. K. K. Lacey (Lamartine, Yates & Lacey, solicitors). The superintendent pharmacist and the managing director of the company were available but only documentary evidence was considered. Giving the Committee's decision the chairman said that the case was one in which an inquiry had been held on February 5, 1958, concerning four convictions for offences of selling poisons in dispensed medicines and one offence of selling a poison not under qualified supervision. At the conclusion of the hearing in 1958 the Committee had made it clear that they took a serious view of the convictions, but instead of imposing upon the company concerned either of the sanctions authorised by the Act, had adjourned the case for two years, and had asked to receive, at the conclusion of that period, reports from the registered superintendent of the company and from the Society's inspector. Both of those reports had been received and they indicated that the company's business had been properly carried on during the period since the inquiry was adjourned. In the circumstances Sir David said that the Committee would take no further action upon that reference.

Convicted of Assault

The next case was one in which it appeared that, on August 21, 1959, the pharmacist concerned had, at a sheriff's court, been convicted of assault, and that on the previous day, in the grounds of a caravan site, he assaulted his wife by punching and kicking her and knocking her to the ground, for which offence he had been sentenced to sixty days' imprisonment. Mr. A. C. Castle (solicitor to the Pharmaceutical Society), said he was in some difficulty regarding the case since he had asked the chief constable of the appropriate city if he would provide some information, or preferably would permit the police officer in charge of the case to attend the inquiry. In his reply the chief constable had said that police reports to the procurator fiscal were confidential, and for that reason he could not permit the officer to attend the inquiry to give evidence. That officer was not an eyewitness, but had investigated for submission of the circumstances to the procurator fiscal. Mr. Castle said he had obtained a certificate of conviction, but it did not carry the matter much further. His difficulty was somewhat increased by the fact that the pharmacist had written to the secretary of the Statutory Committee enclosing with it a statement purporting to be signed by his wife, which was in effect "a 90 per cent. denial" that the pharmacist had been guilty of the offence. The Committee would notice from the certificate of conviction that the pharmacist was plainly and simply charged with punching and kicking his wife about the face and body and knocking her to the ground, but that in the letter to the secretary the pharmacist had completely denied that allegation. "The question I would like, with great respect, to put to the Committee is this. Is it likely that a responsible sheriff of a criminal court of Scotland would send a man to prison for sixty days if he had not committed a serious offence?

"There must obviously have been witnesses, who would have appeared before the sheriff and given their evidence." THE CHAIRMAN: "Must there? Did he not plead guilty?" Replying later, Mr. Castle said he did not know what information had been given to the sheriff, adding, "He must have had some substantial facts." Addressing the pharmacist, the chairman said he must make it clear the Committee had a certificate of conviction in front of them, and could not treat the case on any other basis than that he was convicted of the offence. Sir David continued: "If you want to add anything further by way of explanation of the circumstances, or any matter of excuse or anything of that kind, it is open to you to do so."

Referring to the case at the sheriff summary court, the pharmacist said that his main reason for pleading guilty had been to avoid any publicity in the matter. He had been led to believe that it was purely and simply a local disturbance, and that the ultimate result would be "say a small fine or something, and finish with it. As I allege in the letter, I did not at any time kick my wife or assault her about the body. If necessary, I think I can get witnesses to corroborate that statement." The chairman pointed out that the pharmacist had been given every opportunity to bring any witnesses, and he did not think the Committee would be disposed at that stage to adjourn it for further evidence. "Is there anything else you want to say? You have no witness here you want to call, and you do not want to give evidence yourself, but to rely on the statement you have made?" THE PHARMACIST: "I think it would be best in the circumstances, and without any legal advice, for me to let it rest."

Inquiry Adjourned for a Year

When asked if it had been read out at the sheriff court that he had been convicted for assault on two previous occasions, the pharmacist replied: "It may have been, I do not know." He later admitted that he had been convicted of assault on June 14, 1957, and again on August 18, 1958. Giving the Committee's decision the chairman stated that the Committee found that the pharmacist had been convicted of assaulting his wife on August 21. They regarded that as an offence which rendered him liable to be removed from the Register, and in considering what course they should take they had been compelled to take into account the convictions in June 1957 and August 1959. Sir David continued: "In arriving at our decision we have taken into account the references which you have produced as to your general character, and we are prepared to say that this inquiry shall be adjourned for a period of a year. At the end of that time the Committee will wish to receive from you references as to your conduct during the year's interval. Both of those should be from people who have had reasonable opportunities of knowing what your conduct has been during the year and, if possible, one at least should be from a pharmacist." Unless the Committee were satisfied at the end of the year that the member had been of good behaviour he would be "in grave peril," and any further similar offences would not only render him liable to be punished as he had been during August 1959, but his chance of remaining upon the Register of Pharmacists would be small. The decision of the Committee was that the inquiry should be adjourned for one year. The pharmacist would be reminded shortly before that date, and asked to produce the required references, and would also be informed whether the Committee considered that it would be in his own interests to attend the inquiry.

UNITED STATES DRUG PRICES INQUIRY

Senator Kefauver's subcommittee examines tranquillisers

THE inquiry into the pricing practices of the United States drug industry by Senator Estes Kefauver's subcommittee (see *C. & D.*, January 23, p. 88), began its second set of hearings on January 21, the subject being tranquillisers. Opening the hearing the senator estimated sales of tranquillisers by the industry were between $175 millions and $200 millions a year at manufacturers' price levels.

The first witness for the drug industry was Mr. W. A. Munns (president of Smith, Kline & French Laboratories, Philadelphia), who said that the average cost of a prescription for his company's tranquilliser was $1·70 and that lasted a patient ten days. Asked why his company had not cut back on its profits (calculated by the committee at 16·8 per cent. of sales after taxes in 1958), Mr. Munns pointed out that if all their profits were cut out there would only be a reduction to the patient of about 3 cents a day. Without tranquillisers, he said, mental hospitals would have had to care for an additional 50,000 patients, costing the nation $75 millions annually. When the company's product Thorazine (brand of chlorpromazine) was first introduced on the U.S. market in 1954 the daily cost to the patient was $1 while today it was 15 cents.

U.S. Prices Compared

Dr. John Blair (an economist on the subcommittee) introduced a chart comparing U.S. prices of tranquillisers with those of other producing countries. It showed (among other things) that S. K. & F.'s price to the U.S. chemist for a bottle of 50 tablets chlorpromazine, 25 mgm., was $3·03, against 51 cents in France, 97 cents in Germany, 77 cents in England and $1·22 in Italy. Asked to account for the difference Mr. Munns pointed out that Canadians paid $3·75 and that other countries had lower living standards, lower production costs and perhaps lower promotion costs than the United States. Asked about the difference between Italian and American prices Mr. Munns said, "There's no research in Italy worth a dime. Nothing has come out of there. Italian drug firms sit back and wait for drugs to be developed in other countries and then pick them up." Against that his company had increased its research programme from $1·9 million in 1950 to over $13 millions in 1960. The senate investigators produced figures showing that S. K. & F. sold about $45 millions worth of phenothiazine derivatives in 1958 against $15 millions for American Home Products Corporation, $6 millions for Schering Corporation and $1 million for Warner-Lambert Pharmaceutical Co. 70 per cent. of S. K. & F.'s sales went to hospitals.

The committee's counsel (Mr. P. R. Dixon) pointed out that chlorpromazine was first discovered by Rhone-Poulenc and that, by agreement with the French concern, S. K. & F. had an exclusive sales licence for that product and combination forms of it in the U.S. Therefore, he suggested that S. K. & F. had little to do with developing the drug. Mr. Munns agreed that his company had nothing to do with the discovery of the compound, but claimed that they had done "the lion's share of getting it accepted by the American medical profession."

Commenting on Mr. Munn's testimony, Senator Kefauver suggested that their prices were "completely out of line" even if 9 per cent. was taken out for drug research. "High drug prices may bring on socialised medicine in this country just as they did in England." He didn't like the idea of socialised medicine but "we will get it here unless you do something about drug prices."

Mr. Henry H. Hoyt (president, Carter Products) when asked why the consumer had to pay 10·8 cents for Miltown (brand of meprobamate) when his company produced it at 0·7 cent per tablet, refuted the charge in much the same way as Mr. Munns. He said the company did not regard the retail price as excessive. On the diversity of prices in various countries Mr. Hoyt said they had to sell Miltown at prices in line with the country's standard of living otherwise they would be priced out of foreign markets.

All makers who gave evidence stressed the high marketing costs as one of the chief factors contributing to their products' retail costs.

The hearings have been adjourned until February 23; drug prices in general are then to be discussed.

SCOTTISH DEPARTMENT EXECUTIVE

Is it representative of all sections of pharmacy ?

LENGTHY discussion as to whether the Executive of the Scottish Department of the Pharmaceutical Society was fully representative of all branches of pharmacy, took place at the meeting of the Executive in Edinburgh on January 13. Several members expressed the opinion that the Executive would benefit if one of its members were a hospital pharmacist. It was finally agreed that the Executive must accept the wishes of the electorate, but that individual members might wish to nominate a hospital pharmacist at the next election of the Executive. It was pointed out that, according to the by-laws, "persons not being members of the Executive may be co-opted in an advisory capacity to any committee." MR. MACFARLANE gave notice that he intended to submit a motion for the next meeting seeking to alter the constitution of the Executive.

Since the previous meeting ten "students" resident in Scotland had been registered, making a total of twenty-one for 1959. There had been no new registrations this year to date. The vice-chairman asked if in future the sex of the students registered could be given, as he thought that was important as regards their future length of service to pharmacy.

As the History of Pharmacy Committee in London had become affiliated with the Faculty of the History of Medicine and Pharmacy founded by the Worshipful Society of Apothecaries, London, it was suggested that the Scottish History of Pharmacy Committee should also become affiliated. The resident secretary was asked to obtain fuller particulars.

THE RESIDENT SECRETARY reported that a new screen was now in position in the hall, and special thanks were given to Mr. Morrison for his help in that connection. MR. MORRISON then reported on suitable projectors for the hall, giving prices. As it appeared to be impossible to obtain one projector that would take all sizes of slides including 3¼ x 3¼ in., it was decided to postpone the purchase of a projector. Mr. Morrison further said that many of the projectors being produced at present had unsatisfactory lenses, and he advised delay.

The RESIDENT SECRETARY reported that in recent months he had been trying to reopen the question of the liability of pharmacists in Scotland for jury service. On the advice of Sir Hugh Linstead he had written to the Secretary of State for Scotland asking what his reaction would be to a Private Member's Bill in Parliament seeking to put the pharmaceutical chemist in Scotland on the same footing as the pharmaceutical chemist in England and Wales as regards exemption from jury service. A non-committal reply was received, and Sir Hugh now advised that a Bill should be drafted which he would then try and get leave to introduce under the "Ten Minute Rule." The Resident Secretary was authorised to proceed.

It was unanimously agreed to recommend the reappointment of Mr. C. W. Macfarlane to a committee which the Society's Council was setting up to prepare the next British Pharmaceutical Codex.

It was reported that Mr. H. H. Campbell had accepted the invitation to represent the Scottish Department on the Advisory Committee for the Department of Pharmaceutical Sciences. Members were asked to bear in mind that at the next meeting of the Executive a decision would be required on the subject for discussion at the annual general meeting in Edinburgh.

The RESIDENT SECRETARY reported briefly on the arrangements being made for the Council meetings in Edinburgh on April 5 and 6. Members of Council had been circulated regarding accommodation and it was hoped that Sir Edward Appleton would be the chief guest at the dinner on the Tuesday evening. There would be an excursion on the Wednesday afternoon if sufficient numbers were interested, and members of the Executive would be welcome at it as well as at the dinner.

THE CHAIRMAN said he was happy to intimate that Professor D. M. Dunlop, the Privy Council Visitor to the Society's examinations, had been honoured with a knighthood.

FACTORS INFLUENCING DRUG DESIGN

Dr. Harper's review at an evening scientific meeting in London

INTRODUCING Dr. N. J. Harper, who was to speak on "A Three Dimensional Approach to Drug Design" at an evening scientific meeting of the Pharmaceutical Society in London on January 19, Dr. Frank Hartley congratulated him on his recent appointment as Reader in Medicinal Chemistry at Chelsea College of Science and Technology.

Dr. Harper suggested that it seemed probable that a stereochemical or three-dimensional approach to drug design would lead to greater clinical specificity and a clearer understanding of the sites at which structurally specific drugs acted. The importance of such an approach appeared to be indicated by the stereochemical specificity shown by many enzymes; and by the facts that the majority of substances formed or broken down in metabolic processes were optically active, that the penetration of certain membranes had been shown to be stereochemically dependent, and finally that many drug molecules exhibited in their enantiomorphs substantial differences in biological effect (for example, dextromethorphan could be safely used as an antitussive agent, whereas its enantiomorph showed analgesic and addictive properties). Dr. Harper considered that, while other considerations were important in drug design, the stereochemical approach had often been neglected or not fully exploited.

It was generally accepted, said the speaker, that the mechanism of action of structurally specific drugs involved the reaction of the drug with certain parts or enzymes of certain cells in the effector tissues or organs, and it was suggested that the difference in biological activity shown by many stereoisomers could be attributed to the following stereochemical dependent factors:—The difference in the distribution of the isomers; the difference in the properties of the drug-receptor complex; and the difference in adsorption of the isomers to a complementary receptor surface.

Isomer Distribution Differences

In discussing the differences in distribution of isomers Dr. Harper gave examples of differences in adsorption of isomers on biological and non-biological surfaces, and discussed the recent discovery of bacteria of stereospecific permeation systems (permeases), which were distinct from metabolic enzymes, and the possibility that distribution of enantiomorph drug molecules could be affected by the preferential attack of enzymes upon configurations (for example, optically active mepacrine detected in the urine after administration of the racemic compound).

He suggested that the difference in biological activities between certain enantiomorphs could best be explained in terms of geometrical differences, and the necessity of three (or two) sites in the molecule being correctly orientated at a receptor surface. That aspect of the subject was enlarged upon by the speaker and the examples he discussed included the proposed receptor sites for cholinolytic compounds; the mechanism of action of acetylcholinesterease; and the investigations on analgesics at Chelsea. Those investigations had led to the proposal that "fit" at a receptor surface was involved in analgesic action, and to the postulate that analgesics underwent oxidative dealkylation to give a nor-compound that was involved in a further sequence of biological reactions leading to the analgesic response.

Research at Chelsea

Dr. Harper then gave expanded details of some research being carried out at Chelsea involving, in part, the synthesis of analgesic-type molecules which might be expected to undergo dealkylation. Many of those had proved to be active analgesics. Other investigations involved a more detailed study of those features considered essential in order that the analgesically active compound should fit at the complementary receptor surface. The speaker gave examples of some substituted piperidinols and their esters which had recently been prepared, and which were, in animals, three or four times as active as morphine. Another compound related to the prodine-type analgesics had recently undergone clinical trials and in humans was four or five times as active as morphine (equi-analgesic doses). Unfortunately its respiratory depression was about fifteen times that of morphine. That obvious separation of analgesic from depressant effects opened up interesting possibilities which were being investigated. The investigations at Chelsea emphasised the extensive use of physico-organic determinations in helping to elucidate the configurations of analgesic molecules.

Dr. Harper next directed attention to that aspect of drug action which involved the transportation of the drug to the active site. He discussed the possibility of taking a pharmacologically active molecule which in itself was not suitable for clinical use, whether from systemic toxicity or rapidity of action, etc., and combining that compound with a carrier molecule to produce a pharmacologically inactive compound which, by *in vivo* enzymic attack, liberated the parent active compound. It was considered, he said, that the rate of release and possibly the site of release would depend upon the electronic, steric and configurational characteristics of the carrier group. That such factors did play a rôle in *in vitro* and possibly in *in vivo* enzyme reactions was suggested in connection with the investigations of Levine and Clark into the hydrolysis of amino esters by human serum, and the investigations of Fu and co-workers on the hydrolysis by renal acylase I of N-acylated-L-amino acids with optically active acyl groups.

It was suggested that that approach to drug design should be called drug latentiation (a term suggested to him by Dr. L. Golberg) which he defined as the chemical modification of a biologically active compound to form a new compound, which upon *in vivo* enzymatic attack would liberate the parent compound. The alterations in the parent compound were such that the change in physicochemical properties would affect the absorption, distribution and enzymatic metabolism. It was considered that, by the use of drug latentiation approach, it might be possible to achieve drug localisation and to control the transport of a drug; and the method could be used as an adjunct to pharmaceutical formulation. In drug localisation, provided the interconversion could be localised in a particular cell or tissue, the possibility of direct exclusive attack in the target cell with an active compound and the differentiation between the various and possible biological effects of a compound become feasible. A completely logical use of such an approach depended upon a prior knowledge of the enzyme composition of the target cell. Dr. Harper considered that some recently introduced therapeutically active agents might be considered as examples of drug latentiation and as an example of drug localisation cited stilbœstrol diphosphate. Stilbœstrol showed marked cytostatic activity, in addition to its well known œstrogenic effect. In the use of stilbœstrol diphosphate in the palliative treatment of prostatic carcinoma, use was made of the high acid phosphatase activity in the cancerous tissue of the prostate compared with other tissues (the œstrogenically inert diphosphate was thus preferentially dephosphorylated in the carcinomatous tissue, with the release of the cytostatic stilbœstrol).

Discussion

During the discussion which followed Mr. Lee (Imperial Chemical Industries, Ltd.) asked if the principle involved in the use of stilbœstrol diphosphate had been used elsewhere. Would, for example, cortisone phosphate be preferable to cortisone acetate?

Dr. Harper replied that Seligmann and his co-workers had used a similar approach with nitrogen mustards and that he knew of cases with naturally occurring material where there was considerable difference in biological activity between the parent compound and the phosphate. The application of the principle to cortisone would require investigation. Dr. G. E. Foster (Burroughs Wellcome & Co.) commented on the large number of phosphatides in human male serum and asked about the possibility of stereochemical transformations in the relation of D-(−)-alanine to acetyl-α-methylcholine. The reply was that the route from alanine was stereospecific. Dr. Lanquist (Imperial Chemical Industries, Ltd.) made further comments upon a compound possessing disadvantages when administered orally but which was successfully given in a cream allowing absorption through the skin. That was further enlarged upon by Dr. Harper.

Dr. Barber (May & Baker, Ltd.)

agreed with the general theory of considering the stereochemical configuration when investigating receptors in the host. He went on to say that stereospecificity had not been experienced in chemotherapy. As a general principle a pharmacodynamic drug possessed specificity. In answer, Dr. Harper said that the discovery of the permease system in bacteria was of interest in that connection and that antibacterial drugs were not unknown in which configuration played an important rôle in an antibacterial action.

DR. R. RAPSON (Beecham Research Laboratories, Ltd.) suggested that a too convenient receptor site might militate against the drug design and create a situation in which displacement from the receptor was unlikely. Was it not also possible that a receptor might already be occupied? Would a drug be able to displace an existing occupant? Dr. Harper retraced the factors involved in bonding and said it was unlikely that a drug molecule could not be displaced.

CENTRAL NERVOUS SYSTEM DRUGS

Third statement by the Council of the Pharmaceutical Society

SINCE publication in August 1959 of the Council's advice to pharmacists concerning the circumstances in which drugs which have depressing or stimulating effects on the central nervous system should be supplied, a number of comments have been received from branches of the Society and other organisations and from individual pharmacists. For the most part those comments are critical and may be classified broadly as follows:—

1. The only effective control is legislation.
2. Pharmacists who would like to carry out the advice do not feel disposed to do so because (a) other pharmacists are ignoring it; (b) the public may obtain supplies from unqualified sources.
3. The announcement should have made clear that failure to observe the advice would result in disciplinary measures.
4. The method of issuing the advice was open to objection.

The points will be discussed in turn.

Observations on Members' Criticisms

1. The Council realises that the problem can only be satisfactorily settled by the imposition of legal control, and has advocated that step, but pharmacy cannot put its responsibility on Parliament or on Ministers such as the Home Secretary in his rule-making capacity. The pharmacist is responsible for his own actions, and each individually shares in the responsibility for those of his profession. Pharmacy must make its own decisions on conduct, since it is a calling claiming to have an expert knowledge of drugs and their properties. It should give a lead and stimulate other authorities by its example. If it waits for other authorities to act it will be abrogating its claims to authority in the field of drugs. Members of the public are entitled to expect pharmacy to set the standard in protecting their interests, and it will receive credit to the extent that it does so, irrespective of the effect upon its own material position. At the time the advice was issued the comment in the public Press of all kinds was widespread, and was invariably favourable to the Council's policy.

It will be recalled that the question of controlling carbromal and bromvaletone was referred in May 1958 at the instance of the Poisons Board to the Interdepartmental Committee on Drug Addiction. In December 1959 reference was made in Parliament by the Minister of Health to a recommendation in the Interim Report of the Committee (then shortly to be and now published) that in general any drug or pharmaceutical preparation which has an action on the central nervous system and is liable to produce physical or psychological deterioration should be confined to supply on prescription. He further stated that as an interim and urgent measure the Home Secretary was asking the Poisons Board to advise him which substances should be limited to supply on prescription under the Pharmacy and Poisons Act, 1933. It is important to notice that the Home Secretary's request to the Poisons Board was regarded as an interim and urgent measure, the Minister going on to say that the Ministers concerned were also engaged in a comprehensive review of the whole legislation relating to the control of medical substances and were considering what changes should be made.

The Minister's Reply

In the course of dealing with questions arising out of his statement the Minister said in reply to a question how long it would be before a drug referred to would be withdrawn from sale without prescription that it depended upon the Poisons Board which was the responsibility of the Home Secretary. He added: "However, you will appreciate that even now most chemists will supply these drugs only on prescription as a matter of guidance not of necessity. I am sure that these exchanges in the House today will enforce that good tendency among chemists."

2. (a) Those who think in this way should try and bring their colleagues into line and not take refuge in their shortcomings. In any case the question boils down to a personal decision either to support the dictates of one's conscience or to act against what one believes to be right.

(b) This in effect means that the standard of pharmaceutical practice is to be set by unqualified traders.

Reference has been made to the loss of goodwill of customers who, when refused supplies, go elsewhere. Admittedly that may happen but is a risk which is liable to arise frequently in the conduct of pharmaceutical business when for one reason or another a customer's wishes ought not to be carried out. A pharmacist who has the confidence of his customers is, however, more likely to gain goodwill than to lose it in such cases.

3. To raise the question of enforcement in announcing a policy of this kind would not be the best way to secure co-operation. The Statement on Matters of Professional Conduct gives authority to the Council to say when an article or preparation should be sold only on prescription and it must be assumed that there is a general willingness to observe such advice. It would be inconsistent with this to issue an announcement which suggested that disciplinary action would be needed to secure its observance.

4. The points made in this connection are that there should have been some preliminary announcement of the Council's intention and their reasons for it and a discussion by the Branches before the Council took their decision. There is some justification for this line of thought, but a review of earlier actions by the Council shows that the ground had been prepared. In 1956 a warning was issued that tranquillisers and slimming drugs should be supplied only for use on medical advice. In 1958 the Poisons Board was informed that the Council considered that there was a *prima facie* case for the inclusion of carbromal and bromvaletone in Part I of the Poisons List and the Fourth Schedule to the Poisons Rules, and suggested that the Ministry of Health should undertake an inquiry into the extent of their misuse. Following the reference of the matter to the Interdepartmental Committee on Drug Addiction the Council advised the exercise of the greatest care in the supply of those drugs pending the report of that Committee. All those actions of the Council indicated that a serious situation existed, and it was open to Branches and individual members, did they feel that the Council was pursuing a course with which they disagreed, to raise the matter within the Society in the ways available to them.

Soundness of Advice Confirmed

On the basis of the above assessment of the criticisms that have been made, the Council see no reason to modify the advice which it has given. All the evidence that has accumulated since goes to confirm the soundness of that advice. It is gratifying to note that the need for control of the class of drugs in question has not been challenged, and the Council trusts that this further Statement will satisfy those Branches and members who have so far been critical of the policy of the Council.

In view of the request of the Home Secretary to the Poisons Board to advise him as a matter of urgency what substances in the class of drugs in question should be limited to supply on prescription under the Pharmacy and Poisons Act, 1933, the Council is of opinion that it would be advisable to defer consideration of any further action that may be needed in pursuance of their policy in respect of those drugs until the outcome of that step is known.

[The proposals have now been announced (see p. 165)—EDITOR.]

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Changes in the Control of Drugs

MOVING with a speed that suggests prompting stronger than encouragement from above, the Home Office has most promptly translated the recent recommendations of the Poisons Board (*C. & D.*, February 6, p. 137) into actual proposals to be embodied in Statutory Instruments (now in course of preparation). The proposals are to amend the Poisons List and Rules.

The intention—announced on June 16, 1959—to consolidate the Rules was deferred "since other changes seemed imminent." The consolidation seems likely to be deferred a little longer in view of the extent of the new proposals, since it will probably be more acceptable to issue new Statutory Instruments limited to the amendments and to consolidate as soon as possible thereafter.

The changes proposed are probably wider than many expected. Not only do they affect the group now generally known as the C.N.S. drugs, but they make changes in the status of drugs that were not mentioned during the recent Parliamentary activity that prompted the proposed legislation.

With the C.N.S. drugs are grouped substances such as acetanilide; amidopyrine; androgenic and œstrogenic substances; the active principles of the pituitary, thyroid and suprarenal glands, tolbutamide, etc. Those will be subject to what might be termed modified Fourth Schedule restrictions. Members of the public may be supplied with the drugs only against the prescription of a duly qualified medical practitioner, registered dentist, registered veterinary surgeon or registered veterinary practitioner, but the prescription need only be in writing and be signed by the person giving it with his usual signature and be dated by him. That is an eminently practical point, taking into consideration the difficulty many pharmacists experience in persuading prescribers to carry out the full present legal requirements. It is apparent that the Brain Committee's report, so far as it concerned bromvaletone and carbromal, had placed the Poisons Board in an invidious position and the Board, after at first refusing to take any action (*C. & D.*, January 23, p. 79) has now proposed controls on those drugs.

The list of substances to be restricted under the new control comprises the substances listed in paragraphs 3 and 5 of the Home Office notice, with the addition of "Phenothiazine, derivatives of; their salts; except promethazine; its salts; its molecular compounds" and "chlorpropamide; its salts." The decision to take "the antihistamine substances" out of the Fourth Schedule is an acknowledgement of the changed circumstances that have arisen since those substances were first introduced. As we have stated (*C. & D.*, December 5, 1959, p. 507) the "one-day cold cure" claims no longer arise in respect of those compounds, and many antihistamine compounds have not been subject to any controls.

Few pharmacists are likely to quarrel with the suggested cautionary wording: "Caution. This may cause drowsiness" for preparations intended solely, and made up ready, for the prevention of motion sickness. It has always seemed anomalous that the status of the recipient should determine whether a First Schedule poison should be sent by registered post, and the industry generally will welcome the relaxation of Rule 7 (3)(c).

To keep the Poisons List and Rules more or less in step with the Dangerous Drugs Act, 1951, four compounds and their salts are to be added to Part 1 of the Poisons List and First Schedule of the Poisons Rules. The First and Fourth Schedules are to have two new entries:—

Cyclophosphamide; its salts; and mannomustine; its salts.

Of special interest to chemists who handle veterinary products is the proposal to exempt certain androgenic and œstrogenic substances from the provisions of the Poisons Act and Rules when present in preparations intended for external application only or in animal feeding stuffs.

The amendment of the requirements of subsection (3) of section nineteen of the Act, which requires particulars of medicines supplied or dispensed to be entered in a book, to extend to medicines supplied in accordance with prescriptions given by registered dentists as well as duly qualified medical practitioners, is another eminently practical amendment.

Looking at the proposals generally it occurs to us that the transfer of a number of drugs from the Fourth Schedule to the new restrictions confirms the need for a complete review of the legislation appertaining to medicines. We are of the opinion that, rather than amend the Poisons Rules so extensively, it would have been more appropriate to extend the requirements of Part II of the Therapeutic Substances Act. To do so would, of course, have required the passing of amending legislation in Parliament, and it may not have been easy, in a busy Parliamentary programme, to provide time for that.

A PHARMACIST'S ANTHOLOGY

A CORNER IN QUININE

From *Tono-Bungay* by H. G. Wells

THE idea of cornering a drug struck upon my mind then as a sort of irresponsible monkey trick that no one would ever be permitted to do in reality. It was the sort of nonsense one would talk to make Ewart laugh and set him going on to still odder possibilities. I thought it was part of my uncle's way of talking. But I've learned differently since. The whole trend of modern money-making is to foresee that will presently be needed and put it out of reach, and then to haggle yourself wealthy. You buy up land upon which people will presently want to build houses, you secure rights that will bar vitally important developments, and so on, and so on. Of course the naive intelligence of a boy does not grasp the subtler developments of human inadequacy. . . . I will confess that when my uncle talked of cornering quinine, I had a clear impression that anyone who contrived to do that would pretty certainly go to gaol. Now I know that anyone who could really bring it off would be much more likely to go to the House of Lords!

PRODUCTIVITY IN THE PHARMACY

A common-sense approach to current problems

IF retail pharmacy is to counter the threat that is now so apparent from other retail outlets, then every possible means of increasing its efficiency must be applied.

Much scientific thought has been applied to most of the products that are to be found on the shelves in a pharmacy. The manufacturer has often enlisted in his aid the advantages of applied and theoretical research; not only in his laboratories but also in the factory and on the production lines. His equipment is generally the most accurate that can be devised, and the controls usually apply high standards. That is especially so in the manufacture of pharmaceutical preparations and specialities.

Slow Acceptance of New Ideas

Efficiency of that order is not always so evident at the stages at which the goods are taken off the shelves and transferred to the customer. Work study investigations, comprising method study and work measurement, have come to be accepted in industry and in office administration, but somehow only slowly are the same ideas being applied in the craft of retailing, except perhaps by the larger organisations. The apparent lack of enthusiasm for new techniques among retail pharmacists is a surprising situation in view of the pharmacist's scientific training and the rapid absorption of new ideas and techniques so evident in the products handled in the dispensary.

It is essential—nay, imperative—that retailing should be carried on in as an efficient a manner as possible, and in pharmacy that is even more essential in face of the upward trend of basic costs in the products handled. What is really required is a new attitude of mind to the day-to-day problems of the shop—the little difficulties that so often are " put up with " instead of being systematically tackled; the problems that are so inherent with everyday life that they are no longer regarded as important, but which result in inefficiency and prevent the serving of more customers in the best and most economical way.

The main focus of retailing is at the point at which customer and retailer meet. So long as they are apart the retailer has to rely on inanimate aids. Yet how much time is spent in mere movement around the pharmacy—away from the counter and the customer—for the purpose of collecting goods. An assistant, using a pedometer each day over a three-week period, in a shop measuring 70 ft. x 18 ft. 6 in., found that he walked on average twelve miles a day. Yet, by some, retailing is not considered an arduous or tiring occupation!

The proper application of work study techniques would tend to free the pharmacist and his assistants for their individual jobs, releasing them for more productive activities. There would also be an increase in customer goodwill, because the sales staff would be more readily available.

Work study is usually broken down into two applications —method study, which is an investigation into the way of doing a specific piece of work; and work measurement, which is concerned with the time taken in doing a job. It is method study that has been most successfully applied to retail procedures. The fundamentals of work study techniques are relatively simple, though the answers to the problems may be less so. First pose the problem, then make a detailed research of the facts. Such a record can be made a type of flow process chart showing every small happening. Usually each activity is, in accepted methods of work study, described as coming within the headings inspection, operation, storage, delay or transport. With that information committed to paper, together with any plans drawn to scale, the whole procedure under investigation may be critically examined.

It is on that stage of the procedure that the success of the technique depends, and it is usually best carried out by asking a number of questions.

What is being done? Is it necessary? Could anything else be done?

Where is it being done? Is the place the right one? Could the operation be better done elsewhere?

When is it being done? Is the sequence right? Cannot the work be done better at some other time?

Who does it? Is he or she the right person? Could not someone else do it more efficiently or at less cost?

How is it being done? Is the method the right one? Could the operation not be done in a better way?

Such a critical approach will often result in the formation of a better system for doing a specific piece of work. The next step is to install a new system. If that involves staff, then it is necessary to ensure that they appreciate the object of the exercise so that their enthusiastic co-operation is gained, otherwise the results may not be those intended. Frequent checks should follow.

As to the problems to be tackled the retailer is surrounded by so many that the choice may be one of difficulty.

Is the cash till in the right place? Is it accessible to all who use it? Are customers impeded in their entry to and exit from the shop?—We have all seen some shops that compare favourably with obstacle-race courses. Is the stock kept in an easily remembered and logical order?—an important problem where the training of staff is involved, especially in the smaller organisation, where each member often makes a larger individual contribution.

It is wise to choose a simple problem for a first attempt, in order to become fully familiar with the technique. Critical answers to the questions are essential and it is the clear direct approach and thinking that lead to the positive outlook so necessary in successful retailing.

Those who wish to obtain more information on the subject are recommended to get in touch with their local Productivity Committee or Association. The British Productivity Council, 21 Tothill Street, London, S.W.1, has produced a useful booklet: " Big News for Small Traders " (price 4s.) that is a report on the growing use of work study in retailing. None of the examples quoted in the booklet refers to pharmacy, but all are sufficiently wide in application to be useful.

Reference has been made only to the simpler technique of examination used in method study because that is the one more easily applied to retailing. There are, of course, some highly advanced techniques involving such apparatus as time lapse cinematography, which need an expert to install them and interpret the results.

Readers will have seen (*C. & D.*, December 12, 1959, p. 532) reports of the use of closed-circuit television cameras in a practical exercise in a shop when the movements of assistants and customers were noted. Method study techniques were then used to:—Minimise queueing at busy periods so as to enable more customers to be served and eliminate lost sales; to make the work of assistants less fatiguing; to encourage " impulse buying "; and to decrease congestion in the shop.

Possibly the individual retailer has been led by hearing of those advanced techniques to think that this " new idea " was not for him. It is hoped he will no longer think so.

In a tiny village in Dorset, turnover in the village store was raised by from 30 to 40 per cent.; and sales of some items rose by as much as 100 per cent. without any increase of staff. The increases were achieved by replanning counters and rearranging stock so that the staff were able to cope with at least double the amount of business with less fatigue.

Successful retailing, like successful method study, is often the practical application of common-sense, and every pharmacist in business would claim his share of that.

THE DRUG AND THE ROUTE

A review of methods of administration

J. C. GREENLEAF, M.P.S., and J. W. HADGRAFT, F.P.S., F.R.I.C.
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II. The Respiratory Route

IN this review of the respiratory system as a route of administration of drugs, consideration is given to preparations used for their local effects on the mucous surfaces of the nose, throat and mouth, as well as to drugs intended to reach the deeper parts of the respiratory tract, i.e., the bronchi and alveoli.

Preparations Used Locally in Mouth and Throat

Local infections of the mouth, tongue and throat may sometimes be treated by the application of antiseptic preparations. Crystal violet as a 1 per cent. solution has been used for the treatment of monilial infections in infants; its disadvantages are obvious and other preparations having less objectionable properties have been sought. Newer fungicides that have been used include dequalinium chloride and mycostatin, which has been shown to be more effective than crystal violet in the treatment of infantile thrush (*1*). For that purpose, the mycostatin was used as a suspension transferred to the child's mouth by means of a graduated pipette. Its effectiveness may, in part, be due to the fact that the parent is more likely to persevere with the treatment if the preparation is non-staining and pleasant to use. Pharmaceutical elegance in such circumstances makes an important contribution to the effectiveness of the preparation. Unfortunately the advantages of mycostatin are offset by the high cost of the antibiotic when considered as a routine method of treatment.

Iodine has been widely used in the form of throat paints and is still included as compound iodine paint in the British Pharmaceutical Codex. Astringent drugs such as tannic acid and ferric chloride have been similarly used. Such preparations may have a value in affording temporary symptomatic relief, but they are ineffective against all but the most superficial of infections.

Gargles and mouth-washes have enjoyed a similar popularity and may also give some symptomatic relief. However, there is little evidence that the medicaments present in those preparations penetrate further than when presented in lozenges. Their main value is probably to be found in the mechanical effects that result from irrigating the mouth and throat. The slow release of medicaments from lozenges allows a longer period of time during which their action is exerted.

A wide range of medicaments have been used in lozenge form including phenol, formaldehyde and, more recently, quaternary ammonium compounds and antibiotics. The antibacterial preparations are often combined with a local anæsthetic such as benzocaine, which has a mild local analgesic action. Whilst the activity of such preparations can be demonstrated *in vitro*, there is less certain evidence of their value clinically; the use of antibiotics and sulphonamides in such preparations, moreover, is accompanied by a serious risk of sensitisation. For that reason lozenges of penicillin have been deleted from the British Pharmacopœia and British National Formulary. To avoid some of the dangers of sensitisation, an antibotic used in throat lozenges should be one that is not commonly administered for systemic infections. Tyrothricin has on that account been widely used in throat lozenges.

Hydrocortisone has been used for its local anti-inflammatory action in the treatment of troublesome ulcers of the mouth. For that purpose, hydrocortisone acetate was first incorporated into gelatin-base pastilles, but the most successful preparation is a compressed pellet containing hydrocortisone hemisuccinate sodium. The dose of hydrocortisone is too small to produce the systemic side effects of the hormone, but the local concentration in the mouth is adequate to produce relief.

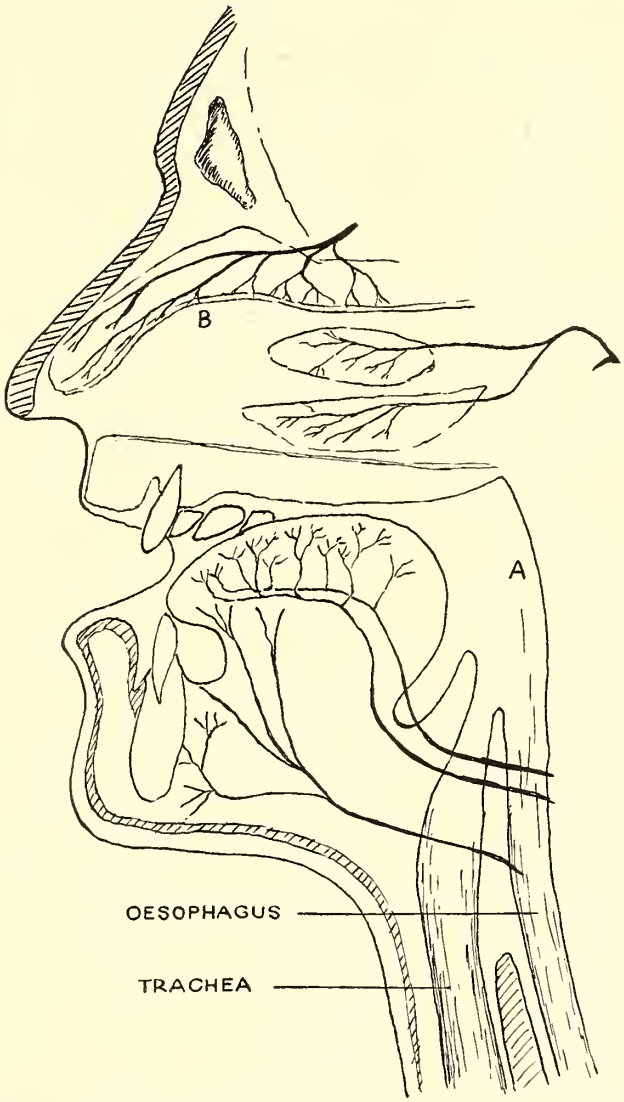


DIAGRAM OF THE NOSE AND THROAT. Superficial infections in the regions of the nose and mouth are relatively easily accessible to local preparations. Infections of the throat (A) are less accessible. The nasal mucosa has an adequate blood supply (B) and some substances may be systemically absorbed from this site.

Local anæsthetics are often required to be applied to the throat and to the nasal mucosa before painful examination techniques and minor operations. Milder degrees of local analgesia are used in the relief of painful sore throats. The local anæsthetic chosen must be capable of penetrating the mucosa in order to reach the sensory nerve endings. Cocaine, amethocaine, benzocaine, and more recently lignocaine, have been found to be effective. However, their use is accompanied by the danger of hypersensitivity reactions, toxic effects due to systemic absorption and, in the case of cocaine, the risk of addiction.

Nasal Preparations

Nasal drops are the simplest mode of application of drugs to the nasal mucosa. Preparations used in that way have included antiseptics, antibiotics, sulphonamides, antihistamines, corticosteroids and vasoconstrictors. The risk of sensitisation is again an important consideration; it is a serious disadvantage in antibiotics and sulphonamides.

Antibacterial substances applied in the form of nasal drops may be expected to be effective against superficial infections. The effect may be prolonged if the aqueous solution is emulsified, and a nasal cream containing neomycin sulphate and chlorhexidine hydrochloride (Naseptin) has been introduced with the intention of reducing in hospitals the risk of cross-infection due to nasal-borne staphylococci.

The chief discomforts associated with infections of the nasopharynx are caused by nasal congestion resulting from inflammation of the membranes and the production of an excess of mucus. Those discomforts may be relieved by the local application of vasoconstrictor drugs, which may sometimes be combined with antihistamines or corticosteroids.

Many of the sympathomimetic amines, such as ephedrine and amphetamine, are capable of penetrating the nasal mucosa and exerting a vasoconstrictor effect on the blood capillaries, but repeated application of such substances is inadvisable since their effectiveness is gradually decreased and a so-called "rebound congestion" occurs. For that reason the over frequent use of vasoconstrictors in local nasal preparations is now discouraged. However, they may be of use in facilitating the drainage of infected sinuses and, when formulated with antibacterial drugs or corticosteroids, may aid the penetration of those constituents into the nasal passages.

Preparations Acting in the Respiratory Tract

Steam or a relatively high humidity is known to have a liquefying effect on mucus, and that is the basis of the use of medicated inhalations such as benzoin inhalation. As an extension of the same principle, various synthetic detergents or wetting agents have been used as spray solutions. Superinone (Triton W.R. 1339), an oxyethylated tertiary octylphenol formaldehyde polymer, used in alkaline solution (Alevaire), has been found to have greater surface-reducing activity than detergents such as sodium laurylsulphate (*2*), which is relatively ineffective in concentrations that are non-toxic. Superinone is comparatively inert and does not readily cause haemolysis. Unlike other detergents, it is not digested by tissue lipases and therefore retains its detergency in the tissues. It is compatible in solution with antibiotics, except those, such as the tetracyclines, yielding acid solutions. Superinone is also compatible with a wide range of other medicaments, including bronchodilators such as isoprenaline sulphate and vasoconstrictors. Alevaire may be used as a vehicle for the aerosol administration of those drugs.

Proteolytic enzymes have also been used in spray solutions to reduce the viscosity of sputum by exerting their ability to hydrolyse and dissolve the protein portion of mucus. For that purpose a solution containing 700,000 Armour units of purified trypsin in 4 mils of sterile Sorensen's phosphate buffer has been administered daily with some success as a fine spray (*3*). The solution is unstable and must be freshly prepared. A more recent development, which avoids that disadvantage, is a preparation consisting of a mixture of chymotrypsin and isoprenaline sulphate (Lomudase) in powder form for use in an inhaler. Chymotrypsin has a slightly weaker proteolytic activity than trypsin, but is preferable because it has been found to be less irritant. Attention has been drawn to the use of dextran powder as a diluent in such preparations and to the possibility that it may produce allergy in some individuals (*4*).

More recent investigations have indicated that water applied as an aerosol is probably the most important agent in reducing the viscosity of mucoid sputum in chronic bronchitis. An hour's inhalation of a plain aqueous mist produced as great a reduction in sputum viscosity as Alevaire, the control solution or normal saline (*5*). Those results have been further confirmed in the treatment of twenty patients suffering from chronic bronchitis who were given inhalations of water as a fine "dry" mist of a particle size of 0·5 to 3 microns (*6*).

Spray solutions containing adrenaline hydrochloride or isoprenaline sulphate have been commonly used to relieve the bronchial spasms associated with asthma and other bronchial disorders. Those preparations should be administered from atomisers producing fine sprays so that they are inhaled in the form of "dry mists." It has generally been accepted that substances in solution are likely to be less irritant to the mucous membrane than dry powders. Recent work has suggested that, in some cases, there is little tendency for the drug to deposit on the pharynx and vocal chords, and irritation is avoided (*7*), if it is of a fairly constant particle size of about 3 microns. Further clinical experience is necessary before the efficiency and safety of powdered preparations for inhalation can be fully assessed. The bronchodilator effect of isoprenaline sulphate, administered as a fine powder by inhalation, was found to be no better than that of a 1 per cent. aqueous spray solution (*4*).

Systemic Administration

In a few instances the nasal mucosa may be a convenient site at which to obtain systemic absorption. That applies particularly to substances which are inactivated in the gastrointestinal tract and which must otherwise be given by injection. Penicillin has been administered by nasal insufflation, and it has been shown that its absorption through the nasal mucosa is enhanced by the addition of hyaluronidase (*8*). The availability of effective oral preparations has rendered the nasal administration of penicillin unnecessary. The antidiuretic hormone of the posterior pituitary has been successfully administered as a snuff in the treatment of diabetes insipidus and nocturnal enuresis. Cyanocobalamin has also been administered by nasal insufflation, which has been found an effective route of administration provided that the patient does not suffer from nasal obstruction or chronic catarrh. The dosages required are of the same order as those used by intramuscular injection (*9*). The posterior pituitary hormones and cyanocobalamin are generally considered inactive when taken by mouth in doses comparable with those suggested for insufflation.

Volatile drugs are well absorbed from the nasopharynx and lungs, and may be administered by inhalation. The traditional form of anæsthesia has the advantage of enabling the anæsthetist to regulate the amount of anæsthetic used during the process of administration. Provided that the rate of administration can be controlled, the depth of anæsthesia can be adjusted to the surgical requirements. The introduction of halothane has stimulated new interest in inhalation anæsthesia, and new methods for controlling the rate of administration have been developed.

Inhalation has also been the traditional method of administering amyl nitrite for the relief of acute attacks of angina pectoris. It is now possible, however, to prevent attacks of angina by giving glyceryl trinitrate or pentaerythritol tetranitrate at spaced intervals throughout the day, and the treatment of acute attacks with amyl nitrite is seldom necessary. Trichloroethylene has also been administered by inhalation for the relief of trigeminal neuralgia.

Preparations Used in Mouth and Throat

Gargles and mouth-washes are usually aqueous solutions that have remained unchanged in basic formulation for many years. Throat paints are usually required to be more viscous, and they therefore contain a high concentration of glycerin or mucilage to form a coating on the mucous surface and prolong the period of contact of the active ingredient. In concentrations above 50 per cent., glycerin produces a burning sensation on mucous surfaces, and that may give the throat paint a useful counter-irritant action.

In the formulation of lozenges the traditional type of basis consists of a combination of sucrose, acacia and water, and is represented by the simple lozenge basis of the British Pharmaceutical Codex. Lozenges are now more commonly manufactured by compression but formulated to have a slower disintegration rate than tablets. They dissolve more slowly than glycogelatin pastilles and are therefore more suitable for antibacterial drugs, which are required to remain in contact with the mucosa for as long as possible. In the selection of suitable diluents and excipients for lozenges, care must be taken to ensure that they do not interfere with the activity of the medicament, a consideration particularly important with antibiotics and antiseptics such as the quaternary ammonium compounds.

Endotracheal tube lubricants are sometimes required containing a local anæsthetic. For that purpose gel preparations such as compound paste of tragacanth, B.P.C., have been used. The natural gums may be replaced by methylcellulose to produce similar preparations having rather more consistent properties. Thus lignocaine hydrochloride may be incorporated into a methylcellulose gel containing glycerin as an humectant. Even with a fairly high concentration of glycerin, however, there is a tendency for such preparations to dry off, leaving an adherent film on the rubber tubing. The polyethyleneglycol compounds (Macrogols) have a number of advantages as lubricants for endotracheal tubes. They form good films without adverse effect on the rubber and, since they are themselves hygroscopic, they do not dry out even if left exposed for prolonged periods. A preparation having suitable consistency may be prepared according to the following formula:

Polyethyleneglycol	300		10 gm.
Polyethyleneglycol	1500	to	100 gm.

If required, lignocaine base may be dissolved in the preparation to provide a local anæsthetic effect.

Formulation of Nasal Preparations

Applications to the nasal mucosa are usually made in the form of aqueous or oily solutions that may be administered either as drops or sprays. The main points in the formulation of nasal solutions may be considered under the headings (a) choice of vehicle, (b) viscosity, (c) tonicity, and (d) *p*H

(a) CHOICE OF VEHICLE.—Oily solutions containing either light liquid paraffin or a vegetable oil such as arachis oil have been used for many years as nasal drops. So early as 1925, however, reports were published pointing out the danger of aspiration into the lungs of oily medicaments. As a result, local irritant effects, decreased ciliary beat and possible infection may result. Accumulation of oil in the lungs may lead to lipoidal pneumonia. Although light liquid paraffin has been considered bland and non-irritant, it reaches the lungs fairly easily because it does not readily stimulate the cough reflex. It may, in fact, be more harmful than vegetable oils, since it is not metabolised by tissue enzymes and remains in the lungs as a foreign irritant (*10*). Most authorities seem now to accept that oily drops and nasal sprays are potentially dangerous and that nasal preparations should be formulated in an aqueous vehicle. All oily drops and sprays have been excluded from the British National Formulary, though they are still marketed commercially.

The suggestion has been advanced that water-miscible emulsions would have advantages over both oily and aqueous formulations, as they would provide on the mucous membrane a protective coating not easily removed by nasal fluids. Emulsions containing about 6 per cent. of light liquid paraffin with Cetomacrogol 1000 or one of the Tweens as emulsifying agent have been suggested (*11*). There have been no clinical reports on the use of those emulsions, and it is difficult to see why the arguments against the use of oil for nasal instillation should not be equally valid against them.

(b) VISCOSITY.—The viscosity of nasal drops should approximate as closely as possible to that of normal nasal secretion so as to minimise washing away from the site at which they are required to act. A suitable viscosity may be obtained by adding 0·5 per cent. of methylcellulose.

(c) TONICITY.—The solution should be isotonic with serum in order to avoid irritation of the mucous membrane so far as possible and to obtain most effective penetration of the medicament.

(d) *pH.*—The nasal secretions have a normal *p*H value of about 7·2 and preparations should be buffered as near to neutrality as possible in order to minimise pain on application and to provide effective treatment of the inflamed nasal mucosa. The tonicity of the preparation, however, is a more important factor, and the preparation should not be buffered to a suitable *p*H if that can be achieved only by making it strongly hypertonic.

Detailed studies of the *p*H of nasal secretions *in situ* under various conditions have been carried out using a specially designed silver/silver chloride glass electrode, and it has been found that the *p*H of nasal secretions in a normal nose is not constant, but varies minute by minute. Sleep, rest, ingestion of food, temperature and emotional changes, as well as infection, have all been found to affect the *p*H of the nasal secretions (*12*).

As might be expected, the use of highly alkaline drugs causes a drift towards alkalinity in the nasal secretions. For example, the inhalation of amphetamine base from an inhaler increased the *p*H from 6·2 to 7·8 in six minutes. Drugs with a *p*H of less than 5, such as adrenaline spray solution, caused a noticeable reduction in *p*H, whereas solutions with *p*H values within the range 5·5 to 6·5, such as 1 per cent. ephedrine hydrochloride, did not have an appreciable effect on the *p*H of normal nasal secretions. During an attack of rhinitis or sinusitis the nasal secretions tend to be more alkaline than normal, and under those circumstances a solution of ephedrine hydrochloride may have a beneficial effect in reducing the *p*H to a value less favourable for the growth of bacteria.

Aerosol Preparations

Strictly speaking the term aerosol may be defined as a system consisting of a suspension of fine solid or liquid particles in air or gas. That definition, however, has been extended to include all those products which depend upon the power of a compressed or liquefied gas to expel the contents from the container.

Solutions intended to penetrate into the bronchioles have been sprayed into the mouth using various types of apparatus which depend upon pressure generated by squeezing the air out of a rubber bulb. More recently, aerosol preparations of a number of bronchodilator drugs have been produced. The original types of aerosol containers were heavy and cumbersome, but development of new propellants and valves have enabled sufficiently low pressures to be used for stainless steel, glass and plastic covered glass containers to become available.

Aerosols may be divided into two main basic types: (a) the three-phase type, in which the medicament is usually in aqueous solution; and (b) the two-phase type in which the active ingredients are dissolved, suspended or emulsified in the propellant. The emulsified kind is probably most suitable for the presentation of drugs for inhalation. They depend upon the vapour pressure of the propellant forcing the liquefied propellant and medicament from the nozzle of the container when the valve is opened. At atmosphric pres-

sure the propellant immediately changes to a gas and disperses the active ingredient as a fine spray of dry particles.

PROPELLANTS.—Despite the fact that a large number of substances have been investigated as possible propellants, there seems to be little published information on the solubility and stability of drugs in those substances. Those factors, together with toxicity, are of great importance in the formulation of preparations of this type.

Liquefied gases, which have been found relatively non-toxic and non-irritant, are the chlorinated and fluorinated hydrocarbons of the methane, ethane and butane series (Freons and Arctons). It is obviously vital that propellants used in spraying substances into the nose and throat should be absolutely non-toxic and non-irritant, and each new product needs thorough investigation before it is marketed.

FILLING.—Two methods have been adopted for filling aerosol containers. In the cold process, the active ingredients are weighed into the open container and cooled, cold propellant is added and the container is then sealed. The method has the advantage of speed, but is unsuitable for aqueous solutions and emulsified products. The second process involves sealing the active ingredients into the container at room temperature and then forcing in the propellant under pressure through the valve.

METERING VALVES.—A device for administering a measured dosage must be an obvious advantage if potent drugs are to be administered by aerosol spray. Recently introduced aerosols are fitted with "metering" valves, which deliver a definite dose of the medicament independently of the time for which the aerosol is held in the operating position.

PARTICLE SIZE.—A factor of some importance in aerosol inhalation therapy is particle size, and the manufacturers of some of the products now on the market claim that "the drug is deposited in the lungs as dry particles of an optimum size predetermined by suitable manipulation during manufacture and not influenced by propellant pressure or nozzle design" (*13*).

The physiological and pharmacological aspects of penetration of liquid aerosols have been covered thoroughly by Dautrebande, who points out that the subject is controversial and that there are wide discrepancies in experimental results and opinions (*14*).

All authors agree, however, that, although depth of penetration increases as the particle size decreases, that factor has to be balanced against the increased percentage of pulmonary retention with increasing particle size.

Other factors, such as electrical charge and the nature of the substance itself, have also been found to affect the penetration and retention of particles. The particle size of hygroscopic substances may increase considerably by absorption of water during passage down the respiratory tract, while particles generated from volatile substances may decrease in size. That fact is important in formulation, as the addition of a hygroscopic substance to an aerosol may enhance the retention of small particles in the deepest parts of the lungs, because the particles will gradually increase in size during passage down the respiratory path. The optimum size for particles of dry powdered drugs intended for inhalation aerosol therapy is at present considered to be about 3 microns.

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PHARMACEUTICAL SOCIETY OF GREAT BRITAIN

C.N.S. DRUGS: ANOTHER STATEMENT (see p.176)

A copy to be sent to each registered pharmacist

A RECOMMENDATION that a further statement on drugs affecting the central nervous system should be published in the Society's journal and that a copy of the statement should be sent to each pharmacist on the Register was approved by the Council of the Pharmaceutical Society at its meeting in London on February 2 and 3.

It was reported that the following members of Council were due to retire in May 1960:—Messrs. A. Aldington, J. C. Bloomfield, H. S. Grainger, H. J. Graves, G. Hinchliffe, W. S. Howells and J. F. McNeal, and that the auditors (Sir Harry Hague, J. C. Hanbury, J. Stuart Hills, Sir Harry Jephcott and L. G. Matthews) were due to retire at the same time.

The report of the Executive of the British Pharmaceutical Conference, which was formally received, confirmed that the cost of a full book of tickets for the Newcastle meeting would be £5 10s., including lunch each day. Day tickets would be available at £2 2s. each, except for the Tuesday, when the cost would be £1 1s. The additional charge for the banquet would be £2 2s., and for the theatre 4s. The number attending the banquet would be restricted to 650.

It was agreed to hold the Liverpool meeting of the Conference in the week beginning September 3, 1962.

The Education Committee reported that, after representations by the Society, a letter had been received from the Burnham Committee stating that the Pharmaceutical Chemist qualification obtained under the current regulations (three-year course) would be regarded as degree equivalent for salary purposes. MR. C. W. MAPLETHORPE pointed out that that recognition was important for the technical colleges; it modified the Burnham Committee's decision of 1956 concerning the Society's qualification and would remove some difficulties experienced in schools and in connection with awards of educational grants by local authorities.

The Privy Council Visitor's report on the examinations in Scotland 1959 was received.

MR. J. B. GROSSET commented that the annual report of the board of examiners for Scotland was a particularly useful one, constructive in its criticisms. In the section on chemistry, for instance, the chairman had said that "too many candidates are not doing sufficient work on their own, and are expecting to gain their knowledge by attendance at the lecture courses only; or the fault may lie in candidates starting to work too near to the examination date." Those were obvious points, but if there were to be a reduced number of entrants to pharmacy they must obtain the best possible results with the reduced number and see that there was a higher percentage of passes. He would like to think that the present report would be quoted to students by lecturers. MR. MAPLETHORPE replied that the reports of the boards of examiners were sent to heads of schools of pharmacy, who would therefore have an opportunity of studying what the examiners thought.

Reports of the Intermediate examinations held in January 1960 were received. In England and Wales there were three

first entries, of whom one passed, one was referred, and one was absent. Of twenty-four re-entries four passed, seven were referred, twelve failed and one was absent. Entrants for a referred subject numbered forty-one, of whom twenty-four passed, fifteen were referred, and two were absent. In Scotland there were no first entries. Of seven re-entries three passed, three failed, and one was absent. Nineteen candidates entered for a referred subject and ten passed, nine being again referred. A report on the Entrance examination in 1960 stated that thirty candidates had entered and that in biology three entered, of whom one failed and two passed; in chemistry nine entered, of whom seven failed and two passed; in physics, twenty-two, of whom three failed and nineteen passed.

Examiners for Scholarships

The Council agreed to invite the following to act as examiners for scholarships, Council prizes and Umney Memorial Prize examinations, 1960:—Scholarships: *Botany,* Mr. C. J. A. Berkeley; *Chemistry.* Dr. D. H. Richardson; *English Essay,* Mr. T. Dewar; *Business Methods,* Dr. E. W. Skyrme; *Pharmacy,* Mr. C. Gunn; *Languages,* Dr. P. Aykroyd. Council prizes: *Pharmacognosy,* Professor G. E. Trease; *Pharmaceutics,* Mr. F. R. C. Bateson; *Physiology,* Dr. G. B. West; *Pharmaceutical chemistry,* Professor K. Bullock. Umney Memorial prize: Professor E. Shotton.

An application was received from the School of Pharmacy, University of Nottingham, for an educational grant to assist a second physiological research expedition to North-west Spitsbergen in July 1960. On the recommendation of the Education Committee the Council authorised a grant of £300.

A letter was received from the British Pharmaceutical Students' Association stating that its annual conference would be held in Sunderland, April 19–22. It was agreed to ask the vice-president to attend.

The Council authorised publication of the following statement concerning the 1959 supplement to the British Veterinary Codex 1953:—

> The Council recommends to the authorities concerned that the specifications and amendments to B.Vet.C. monographs in the 1959 Supplement should apply in the United Kingdom from July 1, 1960, i.e., the date accepted for the British Pharmaceutical Codex, 1959. It is open to authorities overseas to fix such dates as are convenient to them.

It was reported that the sixteenth International Congress of Military Medicine and Pharmacy would be held from April 24 to May 1, in Teheran, Persia, and that the main item for consideration by the Pharmaceutical Section would be the material produced for an international military formulary. The Council accepted a recommendation that the Society should not be represented.

The Benevolent Fund and War Aid Committee made grants amounting to £366 3s. 6d. to six widows, one member and a dependant of a member. Recommendations for grants amounting to £342 to two other widows, a member and a dependant of a member were approved, including £25 from the Orphan Fund. Two applications for assistance were deferred, and in three other cases no grant was made. From the War Aid Fund a grant of £50 was made.

Birdsgrove House

The receipt was reported of a cheque for £82 15s. 6d. from the Romford and District Branch to meet the cost of a washing machine for the convalescent home. The Committee also received letters of appreciation from Mr. J. H. Crook and from beneficiaries of the Benevolent Fund who had recently visited Birdsgrove House. The warden's report showed that, in the month to January 16, four guests had stayed at the home, against five guests in January 1959. A number of gifts in kind were acknowledged. In the three months to January 16, the average number of guests at the home in mid-week (excluding four weeks in which there were no guests) was six.

MR. T. HESELTINE, in submitting the list of special contributions, mentioned subsequent contributions for the Benevolent Fund of £26 5s. from the Monmouthshire and Newport Branch and of £300 from the Manchester Joint Benevolent Fund Committee. Their sincere thanks should go to all those who had contributed to the Manchester total, not only for the large amount of the cheque, but also for all the work they had done, year in and year out, to provide such magnificent sums. He would also call special attention to the fine contribution of £94 10s. 7d. from West Kent, a small but active branch. THE PRESIDENT said that they could not but appreciate warmly those generous gifts.

The Law Committee's report showed that, in December 1959, the Society's inspectors and agents had visited 809 authorised sellers, eight listed sellers, and 870 drug store proprietors and similar traders. Eleven cases of alleged infringements under the Pharmacy and Poisons Act, 1933, were considered and appropriate action taken. Seven former members of the Society, having paid the necessary fees and penalties, had been restored to the Register. The Council approved a recommendation to restore the name of one further person removed more than ten years ago. Recommendations were also approved for the reciprocal registration of eleven persons under Section XIX(16) of the Society's by-laws and of two persons under Section XIX(14). Authority was given for six persons under Section XIX(16) and two persons under Section XIX(14) to be similarly registered on submission of the required documents and payment of the prescribed fees.

THE PRESIDENT reported with regret the deaths of Mr. A. B. Gilmour, Glasgow (a member of the Executive of the Scottish Department, 1914-51, and its vice-chairman in 1951); and Professor F. Schoofs, Liège, Belgium (an honorary member of the Society since 1935). He also congratulated Professor Macdonald on having been made an *Officier de l'Ordre de la Sante Publique* by the French Minister of Health. PROFESSOR MACDONALD, in his acknowledgment, said that, though he was the recipient, it was really a tribute to the Council in general and members of the Franco-British Pharmaceutical Commission in particular. It was also, perhaps, a recognition of all the work that Sir Hugh Linstead had done for the *Entente Cordiale.*

NEW BOOKS

A Text-book of Forensic Pharmacy

THOMAS DEWAR, PH.D., B.PHARM., B.SC.(LOND), F.P.S. *Edward Arnold (Publishers), Ltd.,* 41 Maddox Street, London, W.1. 8½ x 5½ in. Pp. 301. 25s.

THE text of this the fifth edition embodies the changes effected by no fewer than eighteen enactments that have been introduced since 1957, together with the changes necessitated by the publication of the British Pharmacopœia, 1958.

Calendar of the Pharmaceutical Society of Great Britain 1959–60

Pharmaceutical Press, 17 Bloomsbury Square, London, W.C.1. 8½ x 5½ in. Pp. 306. 20s. (postage inland 1s. 3d., overseas 2s.).

LIKE previous editions the Calendar lists the officers, honary and corresponding members, admistration and activities of the Pharmaceutical Society. It contains a directory of the branches of the Society and details of the examination requirements. The text is given of some of the statutes affecting the practice of pharmacy.

Perfumes, Cosmetics and Soaps, Vol. 2

W. A. POUCHER, F.P.S., F.R.P.S. *Chapman & Hall, Ltd.,* 37 Essex Street, London, W.C.2. 8¾ × 5½ in. Pp. xii + 453. 75s.

FOLLOWING closely on the publication of the first volume (*C. & D.,* October 3, 1959, p. 272) the second volume of this standard work deals exclusively with perfumes of all types. The edition—the seventh—includes a new classification of odours based on duration of evaporation, or volatility, of a wide range of aromatics. All the perfume and soap monographs have been revised and the modern formulas appended to each should prove useful guides to those interested in experimentation in perfumery.



"OPEN SHOP"

AN UNSCRIPTED COMMENTARY ON THE SPECIAL PROBLEMS OF THE PHARMACIST IN RETAIL PRACTICE

E. C. TENNER

APPROXIMATELY once in every fortnight it is necessary for me to get my hair cut. My barber works during the same hours my pharmacy is open. Because I am a conscientious pharmacist I make every effort to be first in the chair when the barber shop opens and consequently to start my own work on that morning only about ten or fifteen minutes late. That way few of my customers are inconvenienced by my instruction that no poisons may be sold and no dispensing carried out until I am present. The other morning, however, I was "pipped" at the chair. That's how I came to pick up the *Daily Sketch* while waiting and to read a half-page advertisement about Sentor. The name was new to me. I read on about "American skin specialists' latest prescription for spots, pimples, blackheads and acne. Wonderful new Sentor, in the dab-on stick, covers up blemishes completely . . . kills bacteria. . . . Helps skin heal naturally without a scar." My interest was aroused! Here was another new line to be put into stock. "I wonder what the price is?" I thought. "Who makes it? What is it made of? How comes it to be advertised and me with no recollection of any circular announcement giving me opportunity to stock it in readiness for the campaign?" I read on: "Available from the manufacturers only." "Send 4s. now . . . to Sentor, Smith & Nephew, Ltd., Welwyn Garden City, Hertfordshire." The barber broke into my brown study to call me to the chair. He cut my hair; he talked as usual about television boxing; all I could do as I sat there was wonder: "How long before Smith & Nephew, Ltd., extend their mail order department to include Elastoplast and Nivea and Atrixo?"

Seasonable Skill

To turn from that bitter subject to a sweeter one. There is still left to retail pharmacists a traditional and enjoyable operation which is also a profitable one. The operation is one that is highly seasonable at this time of year. I mean syrup making. I find it extraordinarily satisfying to spend a short while dissolving sugar in purified water in an old iron crock that has lived on my premises longer than I have. Taring the crock—adjusting to correct weight—bottling off the syrup into gallon jars—those simple things are well worth the doing in any pharmacy. Great quantities of linctuses are used all the year round, and especially in winter. All the same, it must be remembered that there is the usual tendency towards the prescribing of more and more proprietary linctuses in place of the B.N.F. variety. Proprietary drug manufacturers are not satisfied with the rights they own in the drugs themselves. They go after the profits to be won from making proprietary medicaments of all kinds from their drugs. The drugs themselves never being placed on the market, the cost of the medicament is inflated to cover the advertising that is essential to sell the proprietaries, and that proper part of the pharmacist's livelihood which he wins by *compounding* drugs is short-circuited away from him.

Basic Prices Again

Often have I referred to the misleading impressions that can be given by "basic price" information which manufacturers of "ethical" proprietary medicines publish on the "stuffers" (sometimes called "literature") which they send as advertisements to doctors and others. A spokesman of the manufacturers has claimed in answer that the Ministry is satisfied with their "basic price" statements. I have never accepted that answer, and I am therefore intrigued to find two pages of the Ministry's official publication "Prescribers' Notes" (Vol. II, No. 13) devoted to "total cost" of preparations to the National Health Service. The Notes refer to the number of queries the Ministry receive as to what constitutes the figure they use themselves: the "total cost." The figure is explained to be the sum of four components: basic price, oncost, dispensing fee and container allowance. "The difference in total cost," says the Notes, "between an expensive preparation and a less expensive one is not the same as the difference between the 'basic prices,' which are usually quoted in manufacturers' advertisements." Figures are given to prove the final statement: "Quite simply, the total saving in any one case is the difference in basic price plus 25 per cent." The "basic price" can give the inquiring doctor an impression that the preparation costs a good deal less to prescribe than in fact it does. The retail price would be a truer guide; if it cannot be worked out, then the Ministry's "total cost" figure should be used. It cannot now be denied that the Ministry has found it advisable to issue its explanation in order to clear up "doubts" that have arisen presumably from the manufacturers' use of the "basic price."

Subjects for Representatives' Discussion

Nineteen branches of the Pharmaceutical Society have sent in thirty-one motions between them to be discussed at the Branch Representatives' meeting in London on May 19. As amendments have to be in by February 20, now is the time for Branches to discuss the questions raised. The motions are a mirror to the mind of part only of the Society, and it must be remembered when considering them that they have been sent in from Branch meetings at which only a fraction of eligible Branch members were present. I feel it could be of interest if that fraction could in each case be reported. However, one can be certain that it is the thinking and caring fraction of the Society that speaks through these motions. The most popular subject is that of central-nervous-system drugs. Eight motions are concerned with them and with the Council's now famous memorandum. Five more are asking for changes in the poisons legislation. Changes in the Societies' constitution are the subject concern of three, and two more deal with the inadequacy of reports of Council proceedings. One motion wants to change the procedure at the annual Council election. This time only three motions are about education. I like Sheffield's demand for the immediate publication of the "long overdue" report of the Council on general practice. I also like the resolutions which focus the Society's attention on the advertising of medicines and the control of new preparations. There is only one resolution on publicity and public relations, but I know that everyone in the Society is anxious to improve the present position and will expect soon to hear from the Publicity Committee.

There is one subject which is not mentioned this year but which I think will presently be again occupying our attention and that is the vexed one of recognition of technical assistants to Pharmacists. Does it matter if the training and registering of these people is handed over to the Society of Apothecaries?



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Linc-o-Lin BEER Shampoo



MAGNUM PACK Retail 4/6

Linc-o-Lin have introduced to their unique range of three Beer Shampoo packs the 8 oz. family size Magnum pack. The Magnum pack represents tremendous economy whether bought for the individual use of one person or the whole family. Retailing at only 4/6d. it offers incredibly good value for money. The pack holds ample for more than 20 shampoos at a cost of a fraction over 2½d. per shampoo! The pack is a handsome apricot flexible polythene container with a smart red cap. Shaped like a miniature Continental beer bottle, it has tremendous sales appeal and is one of the most interesting containers to be seen on the British market.

Linc-o-Lin Beer Shampoo is renowned for its immediate action in bringing high-lights to the dullest hair—setting - *without setting lotion* - the finest hair, and all this without the unpleasant beer odour unavoidable with ordinary beer.

Display this new magnum pack on your counter with the other Linc-o-Lin Beer Shampoo Packs. Reap the rewards that can only be obtained from a first class product.



BABY BARREL
Retail 2/3



SINGLE SACHET
Retail 9½d.

TWIN PACK
Retail 1/-

Box of 6 'Magnum' packs - - 16/- plus 4/- P.Tax
Box of 3 doz. Single sachets - 15/- plus 3/9 ,,
Box of 1 doz. Baby Barrels - - 14/8 plus 3/8 ,,
Box of 3 doz. Twin Packs - - 20/- plus 5/- ,,

DISPLAY BONUS TERMS - 12½% on any 24 boxes. Discount based on net cost - excluding tax.

A *Linc-o-Lin* PRODUCT BY

LINCOLN CHEMICALS LIMITED

ACOrn 6791

55/57, Strafford Road, London, W.3.

TRADE REPORT

The prices given are those obtained by importers or manufacturers for bulk quantities or original packages. Various charges have to be added whereby values are in many instances augmented before wholesale dealers receive the goods into stock. Crude drugs and essential oils vary greatly in quality and higher prices are charged for selected qualities.

LONDON, FEBRUARY 10: Steady demand for a number of CRUDE DRUGS continued during the week; of particular interest were MENTHOL and AGAR.

The tight supply position of menthol was reflected in an upward price movement of Brazilian material by one shilling per lb. on the spot and by at least ninepence for shipment. Australian HONEY, being in better supply following a good crop, was a little easier; the reverse however applied to Argentine material. Matto Grosso IPECACUANHA was about one shilling per lb. dearer at origin. There has been a good demand for RHUBARB from the Continent; replacements are now arriving or are due shortly. Delivery of new-crop Alexandrian pods is expected to be later this year; meanwhile there are no good quality pods (in quantity) for prompt delivery. Among AROMATIC SEEDS, Indian CELERY was easier on the spot but dearer for shipment following reports that America had been buyers at 127s. 6d. per cwt. against last week's 118s. QUASSIA was down by 5s. per cwt.

CITRONELLA OIL maintained its firm tone, the Formosan variety advancing fivepence per lb. but LEMONGRASS dropped threepence per lb. in both positions.

CRUDE IODINE is extremely scarce on the spot and one parcel arriving at Liverpool this week has been held up through a two-day strike of dockers at that port.

Pharmaceutical Chemicals

ACETANILIDE. — Crystals. One-cwt. lots, 2s. 10d. per lb.; 5-cwt., 2s. 9d.

AMIDOPYRIN.—Minimum rate, 20s. 1d. per lb. with usual differentials for smalls.

AMMONIUM ACETATE. — 1-cwt. lots of B.P.C., 1949, 4s. 5d. per lb.

AMMONIUM BICARBONATE.—B.P. powder, £50 5s. per ton; CARBONATE, £81 10s. for lump and £85 10s. for powder.

AMMONIUM CHLORIDE. — One-cwt. lots B.P. powder, 90s. per cwt.; extra-pure crystals at 126s.

AMPHETAMINE. — One to 10-kilo lots: BASE, from 140s. to 160s.; SULPHATE, 110s. to 130s. and *d*-AMPHETAMINE SULPHATE, 405s. to 420s.

AMYLOBARBITONE. — B.P.C. is 82s. 6d. per kilo for less than 25-kilo lots and SODIUM, B.P.C., 92s. 6d. per kilo.

BARBITONE. — Less than 25-kilo lots, 53s. 6d. per kilo. SODIUM derivative, 56s. 9d. per kilo.

BUTOBARBITONE.—B.P.C., 87s. 6d. per kilo in less than 25-kilo lots.

CARMINE.—70s. per lb. for 1-cwt. lots.

COCAINE. — 16-oz. lots, HYDROCHLORIDE, 91s. 6d. per oz.; ALKALOID, 101s. per oz. Subject to D.D.A. Regulations.

CYCLOBARBITONE. — Less than 25 kilos: B.P.C., 73s. per kilo. CALCIUM, 85s.

DICOPHANE (DDT). — One-cwt. lots 3s. 2d. per lb.; 5-cwt., 3s. 0½d.; 1-ton, 2s. 11d.

DIPHENAN.—(Per lb.). 55s. 3d. (56-lb.) to 63s. (1-lb.).

ERGOMETRINE. — Twenty-gm. lots, MALEATE, B.P., £17 10s. per gm.; TARTRATE, £16 5s. per gm.

ETHER.—Per lb. in winchesters:—TECHNICAL B.S.S., and SOLVENT, 5-cwt. 2s. 7d.; (4s. 1d. per litre). In drums the price is 2s. 2d. per lb. ANÆSTHETIC, B.P., 5-cwt., 3s. 10d.; 10-cwt., 3s. 9d.

GLYCERIN.—Pharmaceutically pure (s.g. 1·2627):

Annual purchases or spot lots of	Under 1 cwt.	1 cwt. and under 5-cwt.	5 cwt. and under 1 ton	1 ton and under 5 tons	5 tons and under 25 tons
Per Cwt.	s. d.	s. d.	s. d.	s. d.	s. d.
TINS					
14-lb.	281 0	276 6	272 6	268 0	265 6
28-lb.	279 0	274 6	270 6	266 0	263 6
56-lb.	275 0	270 6	266 6	262 0	259 6
DRUMS					
1-cwt.	—	254 6	250 6	246 0	244 6
2½-cwt.	—	251 6	248 0	243 6	242 0
5-cwt.	—	—	247 6	243 0	241 6
10-cwt.	—	—	246 6	242 6	241 0

For 25 tons and upwards the price is from 265s. 6d. to 240s. as to containers. Bulk deliveries in tank wagons from 236s. to 237s. 6d. Technical grade glycerin, s.g. 1·2627, is 5s. per cwt. less than the above.

HEXOBARBITONE. — 25-kilo lots or over, 115s. per kilo.

HYOSCINE HYDROBROMIDE.—Per oz., 102s.

HYPOPHOSPHITES.—Per lb.:—

	7 lb.	28 lb.	1 cwt.
	s. d.	s. d.	s. d.
CALCIUM, B.P.C. ..	6 9	6 4	5 11
IRON, B.P.C. ..	13 9	13 3	12 9
MAGNESIUM ..	11 6	11 1	10 8
MANGANESE, B.P.C.	13 11	13 5	12 11
POTASSIUM, B.P.C.	9 3	8 10	8 5
SODIUM, B.P.C. ..	7 7	7 2	6 9

IRON SALTS.—GLUCONATE, B.P.C., 6s. 3d. per lb. in 1-cwt. lots; SULPHATE, B.P. crystals, 9½d. per lb. in 28-lb. lots; 1-cwt., 57s. 6d. per cwt., 5-cwt., 52s. 6d. per cwt.; SULPHATE EXSICCATED, 1s. 5d. per lb. for 28-lb., 1-cwt. 123s.; 5-cwt., 113s. per cwt., 1-cwt. fibre kegs free. Other packages extra. PHOSPHATE, B.P.C., 28-lb., 3s. 6d. per lb.; 1-cwt., 3s. 3d. PHOSPHATE, SACCHARATED, B.P.C., 28-lb. lots are 3s. 9d. per lb.; 1-cwt., 3s. 6d. OXIDE, RED PRECIPITATED, B.P.C., 1949, 1-cwt. 2s. 1d. per lb.; CARBONATE, SACCHARATED, B.P.C., 1949, 28-lb., 3s. 3d.; 1-cwt., 3s. AMMONIUM CITRATE, scales, 3s. 6d. per lb. (5-cwt. lots). AMMONIUM SULPHATE, 1-cwt., 1s. 10d. per lb QUININE CITRATE, 2s. 1d. per oz. in 100-oz. tin.

MAGNESIUM CARBONATE. — (Per cwt.), LIGHT, 121s.; HEAVY, 160s. for 1-cwt. lots and about 130s. for 1-ton lots.

MAGNESIUM CHLORIDE. — One-cwt. 1s. 10d. per lb.; 5-cwt., 1s. 7d.

MAGNESIUM HYDROXIDE.—B.P.C., 1-cwt. lots, 3s. 5d. per lb.; 1-ton, 3s. 2d. per lb.

MAGNESIUM OXIDE, B.P.—LIGHT, 3s. 2d. per lb.; HEAVY, 5s. 10d. per lb.

MAGNESIUM PEROXIDE.—B.P.C. (15 per cent.), 3s. 11d. per lb. (1-cwt.).

MAGNESIUM SULPHATE, — B.P. in minimum 1-ton lots varies between £18 and £21 per ton according to size of crystal and manufacturer. Exsiccated, £42 per ton. All ex works.

MAGNESIUM TRISILICATE.—(Per lb.). In 28-lb. packages:—28-lb., 4s. 9½d.; 1-cwt. 3s. 10d.; 5-cwt., 3s. 7d.; 1-ton, 3s. 1d.

MANDELIC ACID.—One-cwt. lots, 12s. 6d. per lb. CALCIUM SALT also 12s. 6d. SODIUM MANDELATE, 13s. and AMMONIUM MANDELATE 50 per cent. solution, 7s. 6d.

METHYL PHENOBARBITONE.—B.P.C., 95s. per kilo for less than 25-kilo lots.

OPIATES.—Home trade prices (per oz.) subject to D.D.A. Regulations:—

	35 oz. and over	Under 35 oz.
	s. d.	s. d.
CODEINE		
PHOSPHATE	41 0	42 0
HYDROCHLORIDE ..	47 3	48 3
SULPHATE	47 3	48 3
ALKALOID	54 0	55 0
MORPHINE		
ACETATE	50 0	51 0
HYDROCHLORIDE ..	50 0	51 0
SULPHATE	50 0	51 0
TARTRATE	60 0	61 0
ALKALOID	61 3	62 3
ETHYLMORPHINE		
HYDROCHLORIDE ..	54 0	55 0
ALKALOID	63 3	64 3
DIAMORPHINE		
HYDROCHLORIDE ..	54 9	55 9
ALKALOID	59 9	60 9

PARACETAMOL. — Minimum 1-ton., 10s. per lb.; 1-cwt., 10s. 3d.

PENTOBARBITONE. — Under 25-kilo lots, 125s. per kilo; SODIUM, 130s.

PHENOBARBITONE. — Under 25-kilo lots, 45s. per kilo; SODIUM SALT, 55s. 6d.

PHOSPHORIC ACIDS.—B.P. (s.g. 1·750) is quoted at 1s. 4d. per lb. in 10-carboy lots. 1–2 carboys, 1s. 8d. per lb. B.P. 1914 is quoted from 1s. 2d. to 1s. 6d. per lb. HYPOPHOSPHORUS, B.P.C., in winchesters is from 7s. 5d. to 8s. 6d. per lb., as to quantity.

PIPERAZINE.—ADIPATE, from 24s. 6d. to 26s. per kilo; CITRATE from 23s. 6d. to 25s. HEXAHYDRATE, 17s. 6d. to 18s. 6d. and PHOSPHATE, 28s. to 30s.

QUINALBARBITONE.—Under 25-kilos, 130s. per kilo.

SALICYLAMIDE.—One-cwt., 6s. 9d. per lb.

SALICYLIC ACID.—One-cwt., 3s. 2½d. per lb.; 5-cwt., 3s. 0½d. per lb.

SALOL.—B.P.C., 9s. per lb. (1-cwt. lots)

SANTONIN. — 5-kilo lots, 400s. per kilo (11s. 4d. per oz.).

SEMICARBAZIDE HYDROCHLORIDE.—Technical grade, 15s. 8d. per lb. for 1-cwt. lots.

SILVER SALTS. — PROTEIN, 1-cwt. lots, 8 per cent., 36s. 3d. per lb.; VITELLIN, 68s. 6d.

STRYCHNINE.—Per oz.; ALKALOID, crystals, 10s.; HYDROCHLORIDE, 10s.; NITRATE, 11s.; SULPHATE, 9s.; all for 1,000-oz. lots.

SULPHACETAMIDE.—One-cwt. lots, 24s. 6d. per lb. SODIUM derivative, 30s.

SULPHAGUANIDINE. — One-cwt. lots, 11s. per lb.

SULPHANILAMIDE. — One-cwt. lots, 6s. per lb.

SULPHAPYRIDINE.—Five-kilo lots, 120s. per kilo.

SULPHATHIAZOLE.—One-cwt. lots, 16s. 9d. per lb.

SULPHOCARBOLATES.—SODIUM PHENOSULPHONATE, B.P.C., 1949 (powder), 5s. 6d. per lb. in 1-cwt. lots and ZINC, B.P.C., 1949, is 5s. 6d.

TANNIC ACID.—The B.P. levis, ex ether, 9s. 9d. per lb.; B.P. powder, 9s. 3d. (1-cwt. lots).

TERPIN HYDRATE.—From 6s. per lb. upwards as to quantity.

TERPINEOL. — B.P. from 3s. to 3s. 6d. per lb. as to quantity.

THEOBROMINE. — ALKALOID in 50-kilos, 71s. 6d. per kilo (32s. 6d. per lb.); 5-kilos, 72s.; SODIUM SALICYLATE: 12½-kilos, 55s. per kilo.

THEOPHYLLINE.—50-kilo lots: ALKALOID ANHYDROUS, 34s. 6d. per kilo and B.P. 33s. 3d.; AMINOPHYLLINE, 33s. per kilo.

Crude Drugs

ACONITE. — Spot: Spanish *napellus*, 2s. 6d. per lb.

AGAR.—Kobe No. 1, 13s. 3d. per lb., in bond; shipment, 13s., c.i.f.

ALOES. — Cape primes, spot, 185s. per cwt. quoted; shipment, 175s., c.i.f. Curaçao, 500s., spot.

BALSAMS.—Per lb.:—CANADA: Spot, 22s. COPAIBA: Para from 7s., duty paid. PERU: Spot 9s. 6d. in bond. TOLU (genuine as imported): spot cleared, March–April delivery, 22s. 6d., landed; B.P., 14s. 3d.

BELLADONNA.—LEAVES (t.a. 0·6 per cent.), 2s. 9d. per lb. ROOT scarce on spot.

BENZOIN.—Sumatra block, spot £22 to £30 as to quality.

BUCHU.—Spot rounds, 4s. to 4s. 3d. per lb.; shipment, 4s. 3d., c.i.f.

CALABAR BEANS.—Spot, 2s. per lb.

CALAMUS.—Root, 1s. 2d. per lb., c.i.f.

CALUMBA.—Root, 100s. per cwt., spot.

CAMPHOR.—B.P. powder, 3s. 7½d. per lb. in bond.

CAPSICUMS. — East African, nominal, 175s. per cwt.

CARDAMOMS. — Aleppy greens, spot, 16s. per lb.; prompt shipment, 15s. 6d., c.i.f. Seeds, shipment, 21s. 6d., c.i.f.

CASCARA. — Shipment, 275s. per cwt., c.i.f.; spot 300s.

CASSIA.—*Fistula* 115s., per cwt., spot.

CHERRY BARK.—Thin natural, 1s. 6½d. per lb.; rossed, 1s. 11d.

CLOVES.—Zanzibar spot, 2s. 9d. per lb.; shipment, 2s. 5d., c.i.f.

COCILLANA.—Bark, 2s. per lb., spot.

COLOCYNTH PULP.—Spot, 2s. 6d. per lb.

DIGITALIS. — *Purpurea* for shipment, 1s. 2½d. to 2s. 6d. per lb., c.i.f., as to quality.

ELEMI. — Spot from 1s. 10½d. per lb. shipment, 1s. 7d., c.i.f.

ERGOT. — Portuguese, 5s. per lb., c.i.f.; spot, 5s. 6d. East European not offering.

FRANGULA.—Spot, 105s. per cwt.

GENTIAN. — Spot: French, 155s. per cwt.

GINGER.—African, 185s. per cwt. spot nominal. Jamaican No. 3, spot, 250s. Cochin, February-March shipment, new crop, 195s., c.i.f.

GUM ACACIA. — Kordofan cleaned sorts, 172s. 6d., per cwt., spot; February–March shipment, 151s., c.i.f.

HENNA.—Indian, spot, 95s. per cwt.; shipment, 62s. 6d., c.i.f.

HONEY. — Australian light amber, 90s. to 95s. and medium amber, 85s. to 90s. Argentine, 102s. 6d. to 105s.; Jamaican, 115s. to 120s.; Canadian clover, 145s. to 150s., all per cwt. on the spot ex warehouse.

IPECACUANHA. — Matto Grosso, 53s. to 55s. 6d. per lb., c.i.f., as to position; Colombian, 53s. 6d., c.i.f., February–March. Spot Colombian 56s.

JUNIPER BERRIES.—Italian 90s. per cwt., spot.

KARAYA. — No. 1 gum on the spot is quoted at 260s. per cwt. nominal, No. 2 at 230s., nominal.

KOLA NUTS. — Jamaican for shipment, 7d. per lb., c.i.f. African, 5½d. spot and 4d., c.i.f.

LANOLIN. — ANHYDROUS, B.P. is from 170s. to 175s. per cwt. in 1-ton lots and HYDROUS, B.P., 150s., free drums, delivered.

LEMON PEEL.—From 2s. 6d. to 3s. 6d. per lb.

LINSEED. — Whole, 85s. per cwt.; crushed, 110s.

LIQUORICE. — Natural root: Persian on the spot, 46s. 6d. and Russian, 70s. per cwt. Block juice: Anatolian from 190s. per cwt.; Italian stick from 310s. to 470s. per cwt.

LOBELIA HERB. — Spot cleared. American for shipment, 4s. 3d. per lb., c.i.f. Dutch not offering.

LYCOPODIUM.—Spot, 25s. per lb.

MACE.—Whole pale blade, 23s. 6d. per lb. on the spot.

MENTHOL. — Chinese, 67s. 6d. per lb., duty paid as to seller; shipment not offering. Brazilian, 43s. 6d., in bond; 43s. 3d., c.i.f.

MYRRH. — (Per cwt.). Good sorts, £26, c.i.f.

NUTMEGS. — West Indian 80's 13s. 3d. per lb., spot; sound unassorted, 10s.; defectives, 8s. 6d.

NUX VOMICA. — Scarce. Shipment 125s. per cwt. c.i.f.; spot, 140s.

ORANGE PEEL. — Spot: Sweet ribbon, 2s. per lb.; bitter quarters: West Indian, 1s.; Spanish, 1s. 7d.

ORRIS ROOT. — Florentine is 340s. per cwt.

PAPAIN. — Tanganyikan 15s. per lb., c.i.f., for grade one, spot, 17s. 6d. Ceylon, No. 1 white, 15s., c.i.f.; brown, 13s. 6d., c.i.f.

PEPPER. — White Sarawak, 7s. per lb., spot; February–March shipment, 7s. 3d., c.i.f. Black Sarawak, 5s. 6d.; shipment, 4s. 9d., c.i.f. quoted. Malabar black, 560s., cwt. spot and 525s., c.i.f. afloat.

PIMENTO. — Spot, 590s. cwt. nominal; shipment, 540s., f.o.b.

QUASSIA.—Spot, 50s. to 52s. 6d. per cwt., ex wharf.

QUILLAIA.—Spot, whole bark, 110s. per cwt.; crushed, 150s. Whole for shipment, 100s., c.i.f.

SAFFRON.—Spanish, 160s. per lb.

SEEDS.—(Per cwt.). ANISE.—Bulgarian, 132s. 6d.; Turkish, 140s.; Spanish, 162s. 6d., duty paid. CARAWAY.—Dutch, 140s., duty paid CELERY.—Indian spot easier at 145s.; shipment dearer at 127s. 6d., c.i.f., quoted. CORIANDER.—Moroccan, 47s. 6d., duty paid; shipment, 33s. 6d., c.i.f., quoted. CUMIN.—Steady. Iranian, 250s., duty paid; Indian, poor quality, 235s.; Indian for shipment, 212s. 6d., c.i.f. DILL.—Indian, 95s. spot; shipment, 82s. 6d. to 85s., c.i.f. FENNEL.—Chinese, 110s., duty paid; Indian, 115s. FENUGREEK.—Moroccan, 45s., duty paid; shipment, 34s. 6d., c.i.f. MUSTARD. — English, 77s. 6d. to 95s.

SENNA. — *Tinnevelly* LEAVES, prime No. 1, 1s. 5d. per lb., f.a.q.; No. 3, 9d. PODS: manufacturing (f.a.q.), 10d. and hand-picked, 1s. 6d. to 1s. 10d. *Alexandria* pods: Manufacturing, offered from 1s. 6d.; hand-picked lower quality from 3s. 6d. to 4s. 6d. Good h.p. cleared.

STRAMONIUM. — Indian LEAVES 60s. per cwt., spot. Dutch 0·5 per cent. alkaloid, 93s., c.i.f.

STYRAX. — Spot, 33s. per lb., shipment, 32s., c.i.f.

SQUILL.—White: from 80s. to 85s. per cwt. spot.

TONQUIN BEANS.—Para spot, 8s. 2d. per lb. Shipment about 7s. c.i.f. Angostura, 11s.

TRAGACANTH.—No. 1 ribbon, £130 per cwt. No. 2, £120 to £125.

TURMERIC. — Madras finger on spot is 115s. per cwt.; new crop, April–May shipment, 97s. 6d., c.i.f.

VALERIAN ROOT. — Spot: Indian (with rootlets), 130s. and Belgian, 175s. per cwt. Dutch whole (max. 2½ per cent. sand) for prompt shipment, 159s., c.i.f.

VANILLIN.—Rates (per lb.) are now:—5-cwt. lots, 23s. 3d.; 1-cwt., 23s. 6d.; 56-lb., 23s. 9d.; smaller quantities, 24s.

Essential and Expressed Oils

ALMOND. — Moroccan, 6s. per lb., duty paid.

ANISE.—Chinese, 7s. 8d. per lb., spot; shipment, 7s. 6d., c.i.f.

BAY.—West Indian, 12s. 6d. per lb. on the spot.

CALAMUS.—Spot, 62s. 6d. per lb.

CANANGA.—Spot, from 42s. 6d. to 45s. per lb.

CASSIA.—Spot, 15s. 6d. per lb.; shipment, 15s., c.i.f.

CEDARWOOD. — American rectified, 5s. per lb. spot.

CELERY SEED. — Dutch oil, 90s. per lb. and Chinese, 65s.

CINNAMON. — From quillings, best English-distilled is 50s. per oz.; other B.P. oils from 165s. per lb. Ceylon leaf, spot 9s. 9d. per lb.; rectified, 11s. 6d. per lb.; Seychelles, 8s. 6d., spot.

CITRONELLA. — Ceylon, spot, 6s. 4d.; shipment, 6s. 2½d. per lb., c.i.f. Formosan, spot, 6s. 9d. in bond; shipment, 6s. 9d., c.i.f.

CLOVE.—Madagascar leaf, spot, 9s. 3d. per lb., duty paid; shipment, 7s. 10d., c.i.f. Rectified 87–88 per cent., 8s. 6d. Distilled bud oil, English B.P., 30s., to 31s.

COD-LIVER. — B.P. is 11s. 6d. per gall. in charged returnable drums. Veterinary is from 9s. 6d. per gall.

CORIANDER. — B.P. oil is quoted from 62s. 6d. per lb.

DILL.—Imported, 27s. 6d. per lb., spot.

GINGER.—Imported; Jamaican, 130s. per lb.; Chinese, 72s. 6d., duty paid.

LEMONGRASS. — Spot, 14s. per lb., and shipment, 13s. 6d., c.i.f.

NUTMEG.—Imported B.P. oil is 90s. per lb English-distilled 100s.

ORANGE.—Spot quotations of sweet oil include Floridan at 4s. per lb.; West Indian, 5s. 6d.; Israeli, 7s. 6d.

PEPPERMINT. — *Arvensis:* Chinese spot, 37s. 6d. per lb. Brazilian, 13s. spot and shipment, 12s. 9d., c.i.f. *Piperita:* Italian "Mitcham-type" from 42s. 6d. to 48s. 6d.; American, 26s. to 30s., as to origin.

PETITGRAIN.—Paraguay, 18s. 6d. per lb., spot; shipment, 18s. 3d., c.i.f.

PIMENTO. — English-distilled berry, 167s. 6d. per lb.; imported, 77s. 6d. Rectified leaf 27s. 6d. per lb .for small lots.

ROSEMARY.—Spanish is 7s. 3d. per lb. on the spot for best quality.

RUE.—Spanish is 25s. per lb. spot.

SAGE.—Spanish, 9s. per lb.

SANDALWOOD. — Mysore, spot 105s. to 107s. 6d. per lb. East Indian, 105s. to 107s. 6d.

SASSAFRAS.—Brazilian is from 3s. 6d. per lb., duty paid.

SPEARMINT. — American oil replacement value 80s. per lb. Chinese, none available.

TANGERINE.—From 24s. to 26s. per lb., spot.

UNITED STATES REPORT

NEW YORK, FEBRUARY 9: New cuts in GLYCERIN brought the soap lye grade down to 19½ cents a lb. and the saponification to 21½ cents, each off half a cent. MENTHOL firmed up again to make the Brazilian $6·90 a lb., up 65 cents; the Japanese $10, up $2; and the synthetic *laevo* $7·75, up $1; all prices nominal. Lower per lb. among CRUDE DRUGS were Tinnevelly SENNA PODS at 20 cents, down five cents; IPECACUANHA at $8, down 25 cents; JALAP ROOT at 65 cents, down five cents. Among ESSENTIAL OILS, PATCHOULI was higher at $5·35 per lb., up 15 cents.

PATENTS

(by permission, Controller, H.M. Stationery Office) British patent specifications are obtainable (price 3s. 6d.) from The Patent Office, 23 Southampton Buildings, Chancery Lane, London, W.C.2.

COMPLETE SPECIFICATIONS ACCEPTED
From the " Official Journal (Patents)," February 3

Substituted piperidines. Imperial Chemical Industries, Ltd. 831,345.

Process for the manufacture of pyridine and quinoline carboxylic acids. CIBA, Ltd. 831,561.

Diagnostic compositions. Miles Laboratories, Inc. 831,804.

Unsaturated sultams. Farbenfabriken Bayer, A.G. 831,400.

Thiocyanic esters and pesticidal compositions containing them. Soc. Des Usines Chimiques Rhone-Poulenc. 831,420.

Atomizers. Rybar Laboratories, Ltd. 831,464.

Pesticidal compositions. Lunevale Products, Ltd., and M. Fitzgibbon. 831,790.

Agricultural chemical compositions. Fisons Pest Control, Ltd. 831,344.

Colostomy device. E. Schacht. 831,624.

Dispensers of liquid, semi-liquid, pulverulent or crystallised products. Specialites P.P.Z. Etablissements P.P. Zecchini. 831,395.

Device for delivering pills to animals. N. J. Phillips Pty., Ltd. 831,680.

Method of packing liquid or pasty goods in hard foils of artificial thermoplastic material. Farbwerke Hoechst, A.G., Vormals, Meister, Lucius & Brüning. 831,310.

Boxes for packaging purposes. F. I. Lewis. 831,335.

Toothbrushes. E. Piermari. 831,312.

Labelling-machines. M. Fairest, Ltd. 831,515.

Hypodermic needles. S. & R. J. Everett & Co., Ltd. 831,819.

Devices for agitating and ejecting liquids and fluid-like substances. E. P. Lathuy. 831,552.

Orthopædic bandages and the manufacture thereof. T. J. Smith & Nephew, Ltd. 831,757.

TRADE MARKS

APPLICATIONS ADVERTISED BEFORE REGISTRATION

From the " Trade Marks Journal," January 27

For detergents (not for use in industrial or manufacturing processes) (3)
EVERITE, 794,788, by Diversey (U.K.), Ltd., London, W.1. GAMBOL, 796,669, by Co-operative Wholesale Society, Ltd., Manchester.

For all goods (3) *and for deodorants; and pharmaceutical and sanitary substances* (5)
REVLON ROLL-ON, 785,576-77, by Revlon, Inc., New York, U.S.A.

For all goods (5)
PERSANTIN, 777,741, by Dr. Karl Thomae G.m.b.H., Biberach on the Riss, Germany. LIPOSTABIL, 791,186, by Aspro-Nicholas, Ltd., Slough, Bucks. DETROXIN, 791,768, by Glaxo Laboratories, Ltd., Greenford, Middlesex. GRASSAROME, 791,803, by Lautier Fils, Ltd., London, W.4. RESPROGEN, 792,746, by Parke, Davis & Co., Detroit, Michigan, U.S.A., and Hounslow, Middlesex. NEUTRATE, 794,867, PANAPED, 796,395, by The British Drug Houses, Ltd., London, N.1. PRODIETON, 795,704, by Nestlé Co., Ltd., London, E.C.2. BRIDAMOL, 796,201, by Calmic, Ltd., Crewe, Ches.

For insecticides, fungicides and preparations for killing weeds and destroying vermin (5)
ABADRIN, 795,231, by British Schering, Ltd., London, W.8.

For food for cats (31)
KITJOY, 794,844, by Beaulah Benedict Sales, Ltd., London, E.C.3.

From the " Trade Marks Journal," February 3

For all goods (1)
CORBU RUBEX, 795,440, by Hercules Powder Co., Ltd., London, W.1.

For anti-freezing preparations (1)
ZERA, 795,793, by Cupal, Ltd., Blackburn, Lancs. CASCADE, 796,229, by Co-operative Wholesale Society, Ltd., Manchester.

For preparations for setting the hair (3)
SWIRL, B780,363, by Rapidol, Ltd., London, W.7.

For non-medicated toilet preparations, soaps, perfumes, cosmetics, essential oils, dentifrices and hair lotions (3)
MAGI-CARE, B787,871, by Henry Tetlow Co., Ltd., London. W.10.

For all goods (3)
KETLENE, 789,979, by Sofnol, Ltd., London, S.E.10.

For soaps, perfumes, essential oils, cosmetics (not being toilet preparations), hair lotions and dentifrices (3)
TEEN 'N' TENTY, B790,533, by Wella Rapid, Ltd., London, N.W.1.

For lipsticks (3)
MINERS TWIN STICK, 790,587, by Miners Make Up, Ltd., Surbiton, Surrey.

For soaps; and cleaning and polishing preparations (3)
BLUE RING, 793,328, by Tesco Stores, Ltd., London, N.18.

For detergents (not for use in industrial or manufacturing processes) (3)
PERFON, 794,476, by Diversey (U.K.), Ltd., London, W.1.

For perfumes, non-medicated toilet preparations, soaps, cosmetic preparations, essential oils and hair lotions (3)
Device with words CIEL D'ETE (SUMMER SKY), 791,954, by Parfumerie L.T. Piver, Paris, France.

For pharmaceutical preparations and veterinary preparations (5)
PFIZER, 756,108, by Chas. Pfizer & Co., Inc., Brooklyn, New York, U.S.A.

For pharmaceutical preparations for use by spraying as dressings for wounds, cuts and minor affections of the skin (5)
SPRAY-O-BAND. B782,096, by Letchworth Pharmaceuticals, Ltd., Letchworth, Herts.

For ear drops being pharmaceutical preparations (5)
CERUMOLEX, 785,481, by Jacob Rabinovitch, London, N.16.

For pharmaceutical preparations and substances (5)
ROX-ODIUM, 786,062, by Luscoe Products, Ltd., Toronto, Ontario, Canada.

COMING EVENTS

Items for inclusion under this heading should be sent in time to reach the Editor not later than first post on Wednesday of the week of insertion.

Monday, February 15

PESTICIDES GROUP, SOCIETY OF CHEMICAL INDUSTRY, 14 Belgrave Square, London, S.W.1. at 5.30 p.m. Dr. T. E. Tomlinson (Imperial Chemical Industries, Ltd.) on " Mode of Action of Dipyridyl Quaternary Salts as Herbicides."

ROMFORD BRANCH, PHARMACEUTICAL SOCIETY, Unicorn, Gidea Park, at 7.45 p.m. Mr. A. Aldington (a member of Council) on " Pharmaceutical Education."

WOKING BRANCH, PHARMACEUTICAL SOCIETY Red House hotel, at 8 p.m. Mr. H. G. Moss on " Another Look at North America."

Tuesday, February 16

CHELTENHAM BRANCH, PHARMACEUTICAL SOCIETY, Gloucestershire Dairy café, Promenade, at 7.45 p.m. Dr. H. Davis (Ministry of Health) on " Some Pharmaceutical Problems."

HARROGATE BRANCH, PHARMACEUTICAL SOCIETY, Blue Bird café, Parliament Street, at 7.30 p.m. Meeting.

HERTFORD BRANCH, PHARMACEUTICAL SOCIETY, Secondary school, Mangrove, at 8 p.m. Miss A. Lothian on " Old English Pharmaceutical Caricatures."

NORTHAMPTON BRANCH, PHARMACEUTICAL SOCIETY, Corner House café, Wood Hill, at 7.30 p.m. Mr. B. O'Malley (Editor, *Pharmacy Digest*) on " Words and Pictures."

OXFOROSHIRE BRANCH, PHARMACEUTICAL SOCIETY, St. Columba's hall, Alfred Street, Oxford, at 8 p.m. Dr. A. Roberts on " Subject of Topical Medical Interest."

SHEFFIELD BRANCH, PHARMACEUTICAL SOCIETY, Grand hotel, at 8 p.m. Meeting.

SOUTH-EAST LONDON CHEMISTS' ASSOCIATION, METROPOLITAN BRANCH, New Cross Inn, 323 New Cross Road, London, S.E.14, at 8 p.m. Members' night.

WEST MIDDLESEX CHEMISTS' ASSOCIATION BRANCH, Bell hotel, The Mall, Ealing, London, W.5, at 8 p.m. Professor A. Wilson (Privy Council Visitor to the Society's examinations) on " Prescribing under the Health Service."

Wednesday, February 17

AYRSHIRE BRANCH, PHARMACEUTICAL SOCIETY, Elms Court hotel, Miller Road, at 7.30 p.m. Mr. H. W. Tomski on " Economics of National Health Service Dispensing."

BURNLEY BRANCH, PHARMACEUTICAL SOCIETY, Cross Keys hotel, St. James Street, at 7.45 p.m. Dr. P. D. Drinkwater on " 1948 and All This."

LIVERPOOL CHEMISTS' ASSOCIATION BRANCH, Adelphi hotel. Dinner, dance.

LONDON SECTION, ROYAL INSTITUTE OF CHEMISTRY, King's College, Strand, London, W.C.2, at 6.30 p.m. Dr. W. G. S. Parker on " Rocket Propellants."

ROYAL SOCIETY OF ARTS, John Adam Street, Adelphi, London, W.C.2. at 2.30 p.m. Symposium on " The Training of British Staff for Overseas Posts."

SCOTTISH DEPARTMENT, PHARMACEUTICAL SOCIETY, 36 York Place, Edinburgh, at 7.45 p.m. Dr. J. Gillies (Edinburgh University) on " The Evolution of Modern Anæsthetic Procedure."

SOUTHEND-ON-SEA BRANCH, PHARMACEUTICAL SOCIETY, Garon's banqueting hall, High Street, at 7.30 p.m. Dinner, dance.

Thursday, February 18

BIRMINGHAM BRANCH, PHARMACEUTICAL SOCIETY, Chamber of Commerce, New Street, at 7.45 p.m. Meeting.

BLACKPOOL BRANCH, PHARMACEUTICAL SOCIETY, Imperial hotel, North Promenade, at 7.45 p.m. Meeting.

BOURNEMOUTH BRANCH, NATIONAL PHARMACEUTICAL UNION, Grand hotel, at 8 p.m. Mr. A. Aldington (a member of Council) on " Current Affairs."

EAST METROPOLITAN BRANCH, PHARMACEUTICAL SOCIETY, Wellcome Foundation, 183 Euston Road, London, N.W.1, at 7 p.m. Dr. E. W. Tapley on " Corticosteroids."

GREAT YARMOUTH AND LOWESTOFT BRANCH, PHARMACEUTICAL SOCIETY, Mathes restaurant, King Street, Great Yarmouth, at 7.45 p.m. Dinner, dance.

LEEDS BRANCH, NATIONAL PHARMACEUTICAL UNION, Great Northern hotel, at 8 p.m. Mr. G. H. M. Graham (chairman, Central N.H.S. Committee) on " Mainly N.H.S."

LONDON BRANCH, GUILD OF PUBLIC PHARMACISTS, Joint meeting with the EAST METROPOLITAN BRANCH, PHARMACEUTICAL SOCIETY, see above.

MANCHESTER PHARMACEUTICAL ASSOCIATION BRANCH, Engineers' Club, Albert Square, at 7.45 p.m. Mr. A. L. Dyke (Home Office) on " Some Aspects of Control of Narcotic Drugs and Addiction to Them."

PORTSMOUTH BRANCH, PHARMACEUTICAL SOCIETY, Queen Alexandra hospital, Cosham, at 7.30 p.m. Meeting.

SOCIETY FOR ANALYTICAL CHEMISTRY, Council Chambers, Colmore Row, Birmingham, at 2.30 p.m. Symposium " Food Analysis."

UNIVERSITY OF LONDON, King's College, Strand, London, W.C.2, at 5.30 p.m. Dr. H. Isbell (Director, National Institute Addiction Research Centre, U.S.A.) on " The Pharmacology of Opiate Addiction."

Friday, February 19

FINE CHEMICALS GROUP, SOCIETY OF CHEMICAL INDUSTRY, 14 Belgrave Square, London, S.W.1, at 6.30 p.m. Dr. E. B. Knott (Kodak, Ltd.) on " Organic Chemistry of Colour Photography."

MICROCHEMISTRY GROUP, SOCIETY FOR ANALYTICAL CHEMISTRY, Post-graduate medical school, Ducane Road, London, W.12, at 6 p.m. Meeting.

WIMBLEDON PHARMACISTS' ASSOCIATION, Town Hall, at 7.45 p.m. Films.

TELEVISION

February 21–27	London	Midland	North	Scotland	Wales	South	N.E.	Anglia	Ulster
Alka-Seltzer ...	1	1	1	1	—	1	1	1	—
Anadin	4	4	5	4	4	3	3	4	4
André Philippe hair lacquer ...	—	—	1	—	—	—	—	—	—
Andrews liver salt...	—	—	—	—	—	—	—	2	2
Anne French preparations ...	1	—	1	—	—	—	—	—	—
Askit	—	—	—	12	—	—	—	—	7
Aspro	6	—	6	4	6	6	6	—	—
Beecham's pills ...	2	2	2	2	2	2	2	2	2
Beecham's powders .	4	4	4	5	4	11	4	11	4
Bengers food ...	—	—	—	—	—	—	2	—	—
Bristow's lanolin shampoo ...	3	2	2	—	—	3	—	—	—
California syrup of figs	—	1	1	2	—	—	—	—	—
Cephos	—	—	3	—	—	—	—	—	—
Coldrex	2	2	2	2	—	2	2	2	—
Coliclean	—	—	4	—	—	—	—	—	—
Cuticura	—	2	2	—	—	—	—	—	—
Daxaids	—	1	1	—	—	—	—	—	—
Dekrasil	—	—	3	—	—	—	—	—	—
Delrosa	1	1	1	1	1	1	1	1	—
Dixor products ...	2	—	—	—	2	—	—	—	—
Dristan	—	1	—	—	—	—	—	—	—
Eno's " Fruit Salt "	2	2	2	—	—	—	—	—	—
Euthymol tooth-paste	2	—	1	1	1	1	1	1	—
Evans Williams medicated shampoo	3	3	3	—	3	3	3	—	—
Fynnon salt... ...	1	1	1	1	1	1	1	—	—
Germolene	2	1	2	2	3	2	2	—	4
Gillette	1	1	1	1	1	1	1	1	1
Glovelies	—	—	—	—	—	2	—	—	—
Glymiel jelly ...	—	—	—	—	—	—	—	—	3
Hemotabs	—	—	—	—	—	2	—	—	—
Horlicks	3	3	3	2	3	3	3	2	2
Imperial Leather ...	2	2	2	2	2	2	2	2	2
Johnsons baby suds	2	2	2	2	2	2	2	2	2
Kleenex	2	3	3	2	2	3	2	2	2
Kolynos	—	1	1	—	—	—	—	1	—
Kruschen	—	1	—	—	—	—	—	—	—
Lantigen	—	1	1	—	—	—	—	—	—
Lectric shave ...	1	1	1	—	—	—	—	—	—
Lemskin	1	1	1	1	—	—	—	—	—
Loxene shampoo ...	1	1	1	1	1	1	1	1	1
Lucozade	3	3	3	—	3	3	3	3	3
Mac throat sweets	3	4	—	—	—	—	—	—	—
Marigold gloves ...	3	11	6	2	2	2	1	3	2
Max Factor	3	3	3	3	3	3	3	3	3
Mentholatum rub ...	2	—	2	—	—	—	—	—	1
Milk of Magnesia... tablets	1	1	1	—	—	—	—	—	2
Nemakol	—	—	1	—	1	—	1	—	—
Penetrol	—	1	1	—	—	—	1	—	—
Pepsodent	3	3	3	3	3	3	3	3	3
Phillips tonic yeast	—	—	—	—	—	—	2	—	—
Phillips tooth-paste .	1	—	—	1	—	—	—	—	—
Phosferine	1	1	1	1	1	1	1	1	1
Phyllosan	1	1	1	—	—	1	1	1	1
Preparation " H "...	—	—	1	—	—	—	—	—	—
Rennies	2	2	2	2	2	2	2	3	3
Ribena	1	1	1	—	1	—	1	1	1
Rimmel beauty on a budget	1	1	1	1	1	1	1	1	—
Rinstead pastilles ...	2	1	—	1	4	1	2	1	3
Rivella	4	—	—	—	—	—	—	—	—
Savril	—	—	—	—	—	—	2	—	—
Scott's emulsion ...	—	—	1	—	—	—	—	—	—
Scotties	3	3	3	3	3	3	3	2	3
Setlers	2	2	2	—	2	2	2	—	2
Silvikrin hair cream shampoo	2	10	10	1	3	3	3	—	—
Sun Orange Quosh	2	1	2	3	8	2	3	—	—
Suregrip gloves ...	—	—	—	—	2	—	—	—	—
Valderma balm ...	1	1	1	1	1	1	1	—	—
Valderma soap ...	1	—	1	2	—	—	2	—	—
Vaseline petroleum jelly	—	2	—	—	—	—	—	—	—
Vaseline medicated shampoo	5	5	5	5	5	5	5	5	5
Virol	1	1	1	—	—	—	—	—	—
Vykmin	—	3	—	—	—	—	—	—	—
Winspray	1	1	1	1	1	1	1	1	—
Yeast-Vite	—	—	—	—	1	—	—	—	—
Zeph nasal spray ...	2	1	1	1	2	1	1	1	1
	—	—	—	2	—	—	—	3	—



Metal display unit for Choice products available from Durazone Sales, Ltd., Lovers Walk, Ballards Lane, London, N.3.

PRINT AND PUBLICITY

PRESS ADVERTISING

POTTER & CLARKE, LTD., River Road, Barking, Essex: Potter's catarrh pastilles. In *Woman's Weekly, Woman's Realm, My Home, Woman & Home, Wife & Home, Woman's Day, Woman's Illustrated, Modern Woman, Woman's Mirror, Woman's Companion.*

RIMMEL, LTD., 146 New Bond Street, London, W.1: Beauty on a budget. In *Woman's Realm, Woman's Weekly, Woman's Day, Woman's Companion* and *Daily Mirror.*

ROBINSON & SONS, LTD., Wheat Bridge Mills, Chesterfield: Paddi and Paddi-Pads. Widely in a variety of publications.

SCOTT & BOWNE, LTD., 50 Upper Brook Street, London, W.1: Williams Lectric shave. In *Daily Mirror* and *Daily Express* during coming months.

SMITH & NEPHEW, LTD., Bessemer Road, Welwyn Garden City, Herts: Atrixo. In *Woman, Woman's Own, Woman's Realm, Woman's Weekly* and *Daily Mirror.*

THORNTON & ROSS, LTD., Linthwaite, Huddersfield: Vi-lan. In *Sunday Express, People, Empire News.*

WHITEWAYS CYDER CO., LTD., Whimple, Devon: Sanatogen tonic wine. In national Press and provincial evening and weekly papers.

PUBLICATIONS

Medical Propaganda

Manufacturers' leaflets, folders, booklets, etc., directed to doctors but available to pharmacists.

PHARMETHICALS (LONDON), LTD., 20 Gerrard Street, London, W.1: " Praenitrona," " Scheriproct " (information cards), " Primodos " (4-p. folder), " Primolut N." (information cards, 4-p. and 6-p. folders).



CROWNER FOR NEW FLASKS : Thermos, Ltd., Seymour Road, London, E.10, are distributing the crowner here illustrated for their new Thermos sixteen range of vacuum flasks.

C. & D. WEEKLY LIST OF PRICES

A = Advanced; R = Reduced; I.R.P. = Inclusive Retail Price; * = Tax 25 per cent.; ‡ = Tax 50 per cent.

		Doz.	I.R.P.	
ALLEN & HANBURYS, LTD. (from February 1)				
Sugarless pastilles	2 oz.	15 9	1 9	*A*
M. BEETHAM & SON, LTD. (from February 15)				
Larola‡	2 oz.	15 0	2 6	*A*
	3 oz.	21 0	3 6	*A*
	6 oz.	33 0	5 6	*A*
BOOTS PURE DRUG CO., LTD.				
Mycota cream		16 0	2 0	*R*
DISTILLERS CO. (BIOCHEMICALS), LTD. (from February 15)				
Direma tablets		Each		
25 mgm.	25	5 9	8	7½ *R*
	100	21 4	32	0 *R*
	500	104 0	156	0 *R*
50 mgm.	25	10 4	15	6 *R*
	100	39 0	58	6 *R*
	500	189 0	283	6 *R*
THOMAS MARNS, LTD.		Doz.		
Ipsolon tablets*		18 11	2	6 *A*
balm large*		26 6	3	6 *A*
NEW HYGIENE, LTD.				
Scentinel aerosols			3 11	*R*
PAINES & BYRNE, LTD.		Each		
Cobalin insufflation outfit		12 8	19	0 *R*

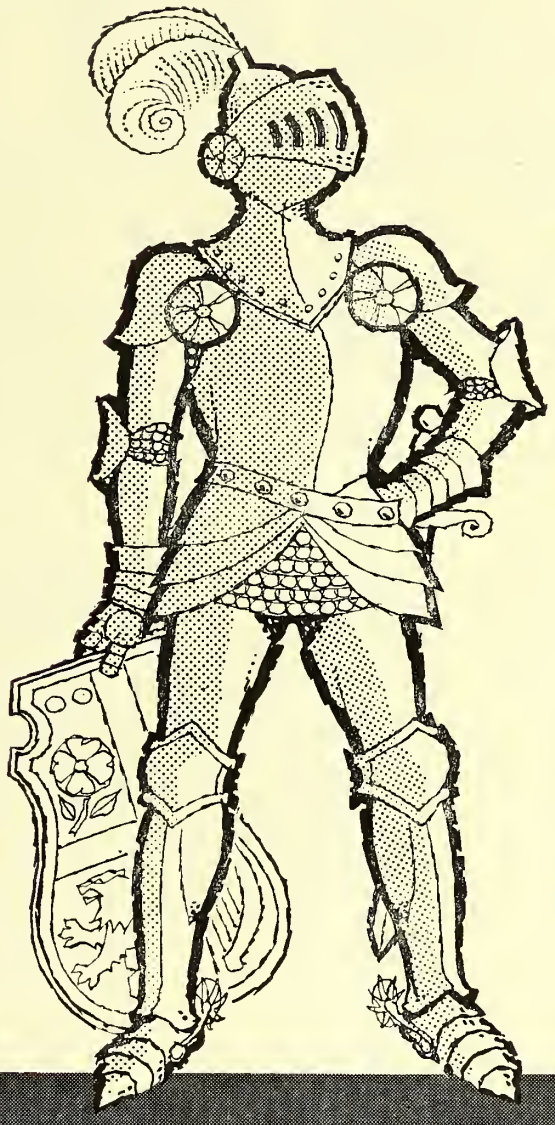
PURCHASE-TAX EXEMPTIONS

(from February 2)

THE BRITISH DRUG HOUSES, LTD.			
Disamide tablets	25	4 6	6 9 *R*
	100	13 0	19 6 *R*
	500	56 0	84 0 *R*
Mycil powder		1 6	2 3 *R*
FBA PHARMACEUTICALS, LTD.			
Marbadal C tablets	6		5 9 *R*
	30		25 9 *R*
E. R. SQUIBB & SONS, LTD.			
Rautrax improved tablets	25	9 10	14 9 *R*
	100	37 4	56 0 *R*
	500	169 4	254 0 *R*

NEW PRODUCTS AND PACKS

BOOTS PURE DRUG CO., LTD.			
Melsedin tablets*			
150 mgm.	25	5 0	8 9
	100	15 0	26 3
	500	60 0	105 0
BURROUGHS WELLCOME & CO.			
Cortisporin lotion 10 mils			15 0
CIBA LABORATORIES, LTD.			
Ismelin tablets*			
10 mgm. (white)	25	8 8	15 2
	100	32 4	56 7
	500	157 4	196 8
25 mgm. (pink)	25	20 0	35 0
	100	76 4	133 7
	500	376 8	470 10
DALES PHARMACEUTICALS, LTD.		1½ Doz.	
Tyordac pastilles	12	36 0	3 0
SAFETY FIRST AID CO., LTD.		Each	
First-aid dressings pack		1 6	2 0
JANE SEYMOUR, LTD.			
" Wonder Look " mascara and eye shadow palette‡			2 3
automatic eye pencil‡			3 3
JOHN STEEDMAN & CO.		Doz.	
Steedman's teething jelly*		17 8	2 6
STEINER, LTD.			
Glo-ahead hair colouriser‡			4 6
THOMPSON & CAPPER, LTD.			
Mothak fly spray improved formulation aerosol			3 9
10-oz. aerosol			6 3
moth proofer aerosol			3 9
Parador concentrated floral disinfectant			2 6



No chinks in the armour

When winter's efforts concentrate on attacking the stoutest constitutions, there are thousands who regard vitamin supplementation as vital protection. 'Multivite' and 'Radio-Malt' are trusty weapons.

'MULTIVITE' TRADE MARK **'RADIO-MALT'** TRADE MARK

Popular choice for vitamin supplementation. Vitamins A, B_1, C and D_2, in full potency in a palatable chocolate coating.

	TRADE	RETAIL
Bottles of 50 pellets	2/4	3/6
,, ,, 500 pellets	14/6	21/9
,, ,, 1000 pellets	27/6	—

For radiant health. Delicious, toffee-flavoured, so popular with children.

			TRADE	RETAIL
1-lb. jars	—	—	2/5½	3/6
2-lb jars	—	—	4/4	6/3

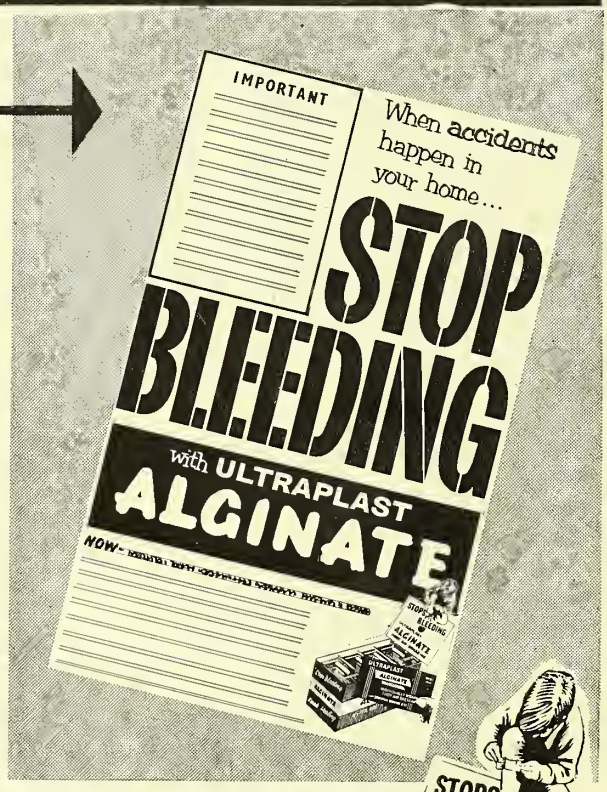
Special winter bonus terms for direct orders.

THE BRITISH DRUG HOUSES LTD LONDON N.1 BDH

ULTRAPLAST ALGINATE ADVERTISING

DAILY MIRROR

This powerful advertisement will appear on the front page of the Daily Mirror on 16th February and again in an excellent position on page 3 on 9th March. This will be the beginning of Ultraplast Alginate advertising for 1960. Display Ultraplast Alginate on your counter and earn right from the start of the campaign.



Stock Ultraplast Alginate and profit from this unique dressing which represents the latest advance in scientific first aid. Ultraplast Alginate Dressings are available in handy pocket packs each containing 4 wound dressings. For freshness and hygiene each dressing is individually wrapped and heat sealed in a moisture-proof cellophane envelope. Eye-catching display outers contain 3 dozen or 1 dozen pocket packs.

Alginate is obtained from sea-weed and is processed, spun and knitted into a silk-like gauze. In contact with tissue fluids the Alginate gauze softens into a jelly, stops bleeding, speeds healing and provides an admirable protection for the wound.



Full details available from:
WALLACE, CAMERON & CO., LTD., 83 West Regent St., Glasgow, C.2. Tel.: Douglas 8078/9

Lederle puts antibiotic therapy on a NEW high plane

UNIQUE high ratio ACTIVITY

the **EXTRA SECURITY** *of NEW*

Ledermycin†

DEMETHYLCHLORTETRACYCLINE

†TRADEMARK

entirely new broad-spectrum antibiotic for prolonged activity at lower dosage

LEDERMYCIN demethylchlortetracycline is an "extra active" high ratio antibiotic derived from a strain of *Streptomyces aureofacians* (the organism from which AUREOMYCIN† chlortetracycline and ACHROMYCIN* tetracycline originate) but with properties which set it way above other tetracyclines. As well as exerting the unsurpassed broad-spectrum action of tetracycline, LEDERMYCIN demethylchlortetracycline achieves far more intensive, far more prolonged activity, with far less antibiotic. Its markedly lower renal clearance rate, together with its higher stability, has the effect of prolonging its powerful antibacterial action for 24-48 hours after the drug is withdrawn.

HIGHEST RATIO of peak activity to daily intake of any known broad-spectrum antibiotic.

HIGHEST RATIO of sustained activity to dosage—giving "extra day" activity and protection against resurgence of primary infection or relapse with secondary invasion, after withdrawal.

HIGHEST RATIO of stability in body media to dosage bringing an even higher standard of consistency to the therapy.

Packing and basic N.H.S. cost :

In a distinctive duo-tone dry-filled capsule. Capsules of 150 mg. Bottles of 16: £1 9s.0d.: 100: £8 14s.2d.; and 1,000: £84 2s.4d.

Average adult dose: 1 capsule 4 times daily.

Lederle | CYANAMID

LEDERLE LABORATORIES a division of CYANAMID OF GREAT BRITAIN LTD. London W.C.2.

By Appointment
To H.R.H. The Duke of Edinburgh
Suppliers of Electrical Shavers
Ronson Products Ltd



This is the electric shaver your customers will want

THE RONSON C·F·L promises to sweep the market. It means big business for you—so make sure you have plenty in stock.

- ✳ Sumptuous NEW styling
- ✳ Striking NEW presentation case
- ✳ NEW voltage control
- ✳ NEW on-off switch
- ✳ NEW clip-on shaving foil

Closest, Fastest, Lightest touch



To help you sell . . .

brilliant NEW display material

. . . free on request from your Ronson representative or the address below.

FOUR MORE RONSON SALES AIDS

Ronson Consignment Scheme

For full details of this scheme, which gives you extended credit and tax benefits on your Ronson order, read the C·F·L Dealer Leaflet.

Free Trial Scheme

Many dealers report 9 out of 10 Ronson shavers sent out on trial are sold within the 14-day free trial period. Deposit for the C·F·L is only 10/-. Ask your Ronson representative for details.

Ronson PROFIT-PLUS Plan for local advertising

Links your shop to the Ronson national advertising campaign. The Dealer Leaflet will give you the full details.

Deferred Terms

Initial payment under this scheme has also been reduced to 10/-. This is another sure sales winner. Your Ronson representative will be pleased to tell you all about it.

Cash in on Faster turnover, Larger profits with the

RONSON C·F·L

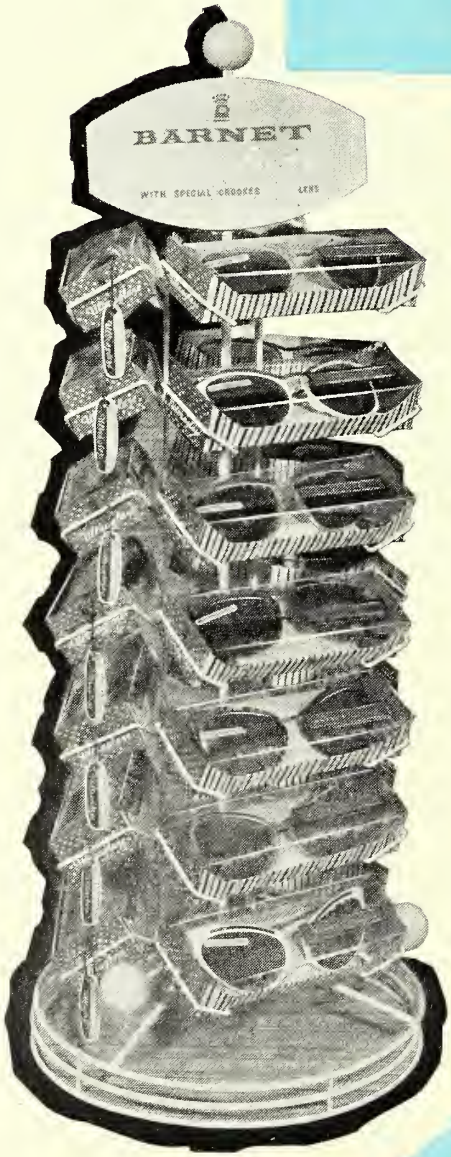
RONSON PRODUCTS LTD, LEATHERHEAD, SURREY TEL: LEATHERHEAD 4444

FOR YOUR QUALITY SALES STOC

BARNET

Ultraglaze

SUNGLASSES



THE LIGHTWEIGHTS WI
THE CROOKES GLASS LENSI

In new clear-view packs, new models
colours, with free new dispensers, at
reduced prices but still with the sa
superb quality GLASS lenses, Ultragl
will be supported by T.V. advertising
millions of homes. All designed to
Ultraglaze for another top sales seas

STANDARD ASSORTME
Available in 4 dozen assortment over a
models costing £19.16.0. When order
refills use REFILL DISCOUNT VOUCHE
enclosed for extra profits.

SPECIAL TRIAL ASSORTME
2 dozen covering half quantities costs
£9.18.0. Every 2 dozen is supplied with
REFILL DISCOUNT VOUCHER for sup
mentary re-ordering on profitable term

FREE DISPENSER
with either assortment

A lens Guarantee
free cleaning cloth
enclosed in every p

ASK YOUR WHOLESALER ABOUT 'ULTRAGLAZE' TODA

E. R. HOLLOWAY SALES LIMITED · WELWYN GARDEN CITY · HERTS

FOR THE MEDIUM PRICE RANGE SELL

BARNET 'Leader' SUNGLASSES



RETAILING 2/- to 5/-
OR 2/6d. to 7/6d.

Excellent value and designed for quick-moving sales at popular prices, the new Leader ranges cover framed, rimless and decorated lightweight styles to suit all tastes and pockets.

Available in two 6 dozen assortments each including 3½ dozen lightweights.

No. 5 Assortment
2/- to 5/- costs £9.18.0.

No. 7 Assortment
2/6d. to 7/6d. costs £12.4.0.

For Barnet carded and boxed styles please ask for further details.

For any order of 2-dozen Leader sunglasses a wire frame dispenser is supplied on request.

FREE DISPENSER
with either assortment

ASK YOUR WHOLESALER ABOUT 'LEADER' TODAY

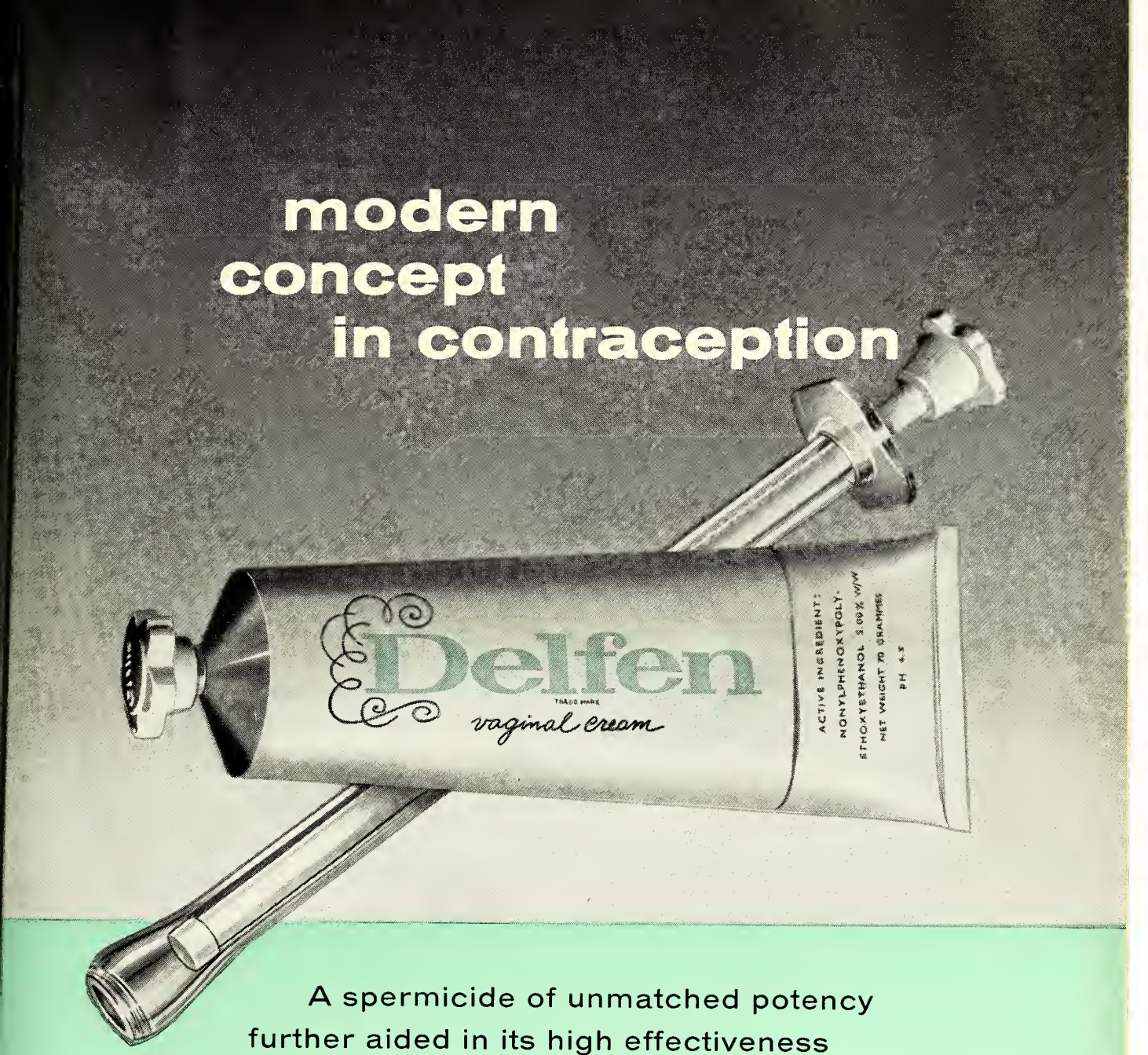
E. R. HOLLOWAY SALES LIMITED · WELWYN GARDEN CITY · HERTS



From the house of Ortho

The universal confidence in ORTHO contraceptive products reflects the standing and resources of ORTHO research in the investigation, design and development of gynaecological pharmaceuticals. This confidence in their uniform quality and contraceptive reliability is shared by physicians and patients alike. It provides the security by which pharmacists everywhere may confidently stock, display and distribute ORTHO products for conception control.

modern concept in contraception



A spermicide of unmatched potency
further aided in its high effectiveness
by simplicity of application

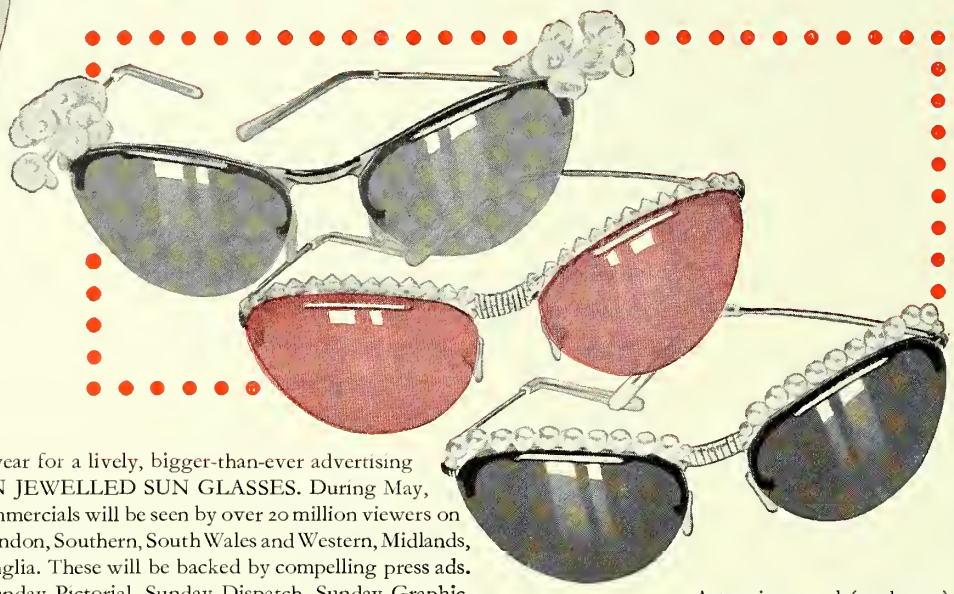
Ortho for confidence in contraception

Ortho Pharmaceutical Limited
Saunderton · Buckinghamshire



the accent is on *fashion*
for the biggest-ever
T.V. & Press campaign for

Stratton
JEWELLED SUN GLASSES



Fashion is the theme this year for a lively, bigger-than-ever advertising campaign for STRATTON JEWELLED SUN GLASSES. During May, June and July, Stratton commercials will be seen by over 20 million viewers on the following networks: London, Southern, South Wales and Western, Midlands, and Yorkshire and East Anglia. These will be backed by compelling press ads. in the Sunday Express, Sunday Pictorial, Sunday Dispatch, Sunday Graphic, Sunday Times, Vogue, Woman & Beauty, She, Harper's Bazaar and Vanity Fair. Check your stocks and tie-in NOW with a good display of STRATTON JEWELLED SUN GLASSES—they're the fashion for record sales this summer!

Attractive stand (as shown) and Display Aids **FREE**



RHODOGLASS in 5 colours: Smoke, Green, Blue, Rose and Degradé

- **8 styles for women**
- **2 smart styles for men**
- **2 clip-over styles**
- **Retailing at 8/6 to 17/6**



FREE plastic carrying case

Ask your wholesaler for illustrated brochure TODAY!

Made in England by **LAUGHTON & SONS LTD.,** Warstock Road, Birmingham 14

makers of the famous *Stratton* compacts

Calcium Gluconate



Calcium gluconate is widely accepted as the most satisfactory means of administering calcium. Prescribed medically for numerous ailments, including debility, rickets, dental caries, neurasthenia and in pregnancy.

and in veterinary practice

Calcium gluconate is also used in the treatment of conditions such as milk fever, eclampsia and lambing sickness. Please write for our new leaflet "Calcium Gluconate in Veterinary Practice" for full details.



Taken by the mouth in tablet or powder form calcium gluconate is well absorbed and practically tasteless. By injection it produces the minimum of reaction. For full details please write for our booklet.

KEMBALL, BISHOP

Chemicals for Industry

KEMBALL, BISHOP & COMPANY LIMITED, RAMSGATE ROAD, SANDWICH, KENT

Telephone: ADVance 1234 & SANDWICH 2371 *(Private interconnecting lines)*

Millions of T.V. Viewers will see this Advertisement every week until the end of June

"That's my Girl!"



SHE USES

Velouty

de DIVOR

POWDER CREAM

Tubes 1'3 & 2'1 Jars 2'11

From Chemists & Chain Stores



Be prepared for the increased demand which television and press advertising must create. Order from your wholesaler *NOW*. Be sure of satisfying your customers. *Display* Velouty Powder Cream on your counter *NOW*.

Prices :

	Tubes No. 2.	No. 3.
Trade	7/6 doz.	12/3 doz.
Retail	1/3 each.	2/1 each.

Jars : Trade 17/2 doz.
Retail 2/11.

DIXOR *Ltd.*
ST. LEONARD'S ROAD
MORTLAKE, LONDON, S.W.14

Write direct for showcard to link with this campaign

HIPSY
BONUS
OFFER



FOR A LIMITED PERIOD

5% Discount on direct orders of two doz.

10% Discount on direct orders of four doz. and over

Orders sent now will give you a bigger profit

AT 2/6 PER 8 OZ. BOTTLE
the best Rose Hip Syrup value

PAINES AND BYRNE LIMITED GREENFORD

FIGGERROLLS

will help to increase your sales of STARCH-REDUCED ROLLS



A NEW FLAVOUR FOR DIABETICS AND SLIMMERS

Diabetics and slimmers alike will welcome the appetising whole-wheat flavour of starch-reduced Figgerrolls. Crisp and delicious, they make a refreshing break in the monotony of an ordinary low-starch diet. Figgerrolls are made with nutritionally valuable fresh wheat gluten, and they are enriched with specially processed wheat germ and the most nutritious parts of the bran. In the manufacture of Figgerrolls every care is taken to ensure that each roll contains the stated amount of protein.

WHITWORTH'S
STARCH-REDUCED

FIGGERROLLS

ANALYSIS
for diabetic or medical purposes

	Gm./oz.
Protein (N X 5.7)	11.5
Carbohydrates	11.7
Fat	1.4
Salt	0.6

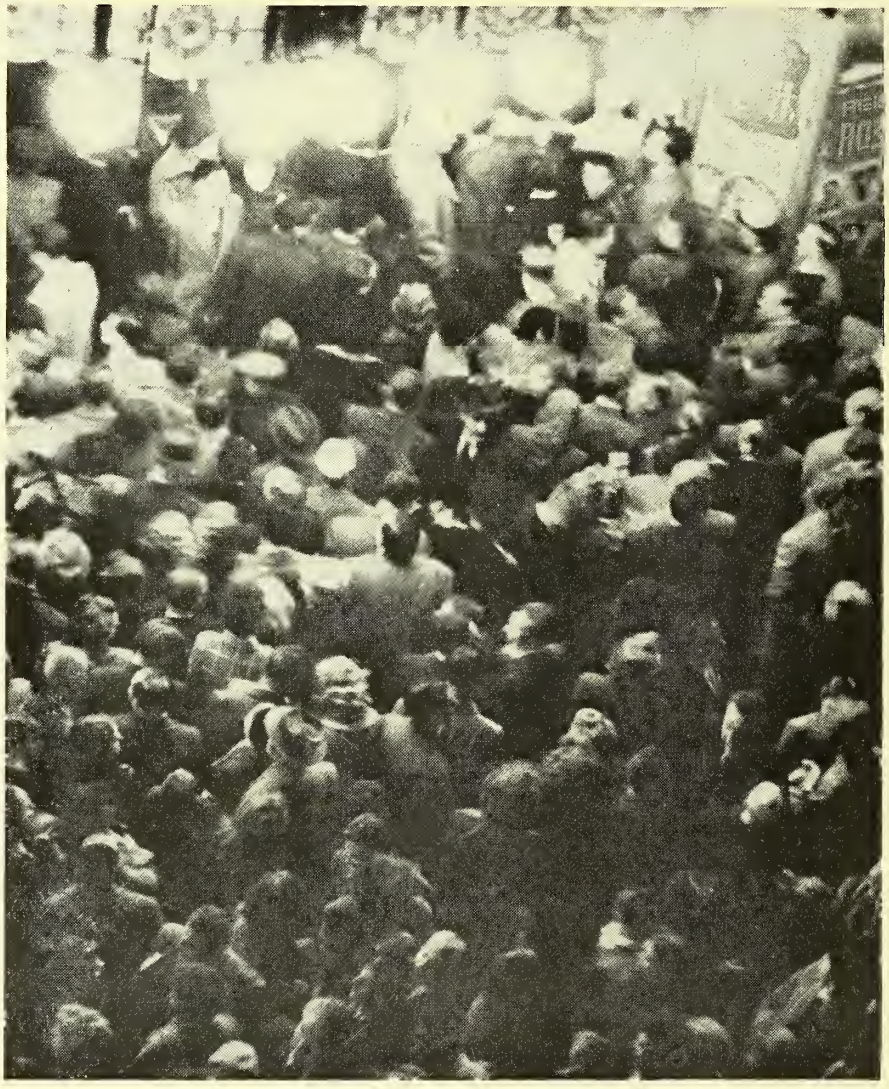
Calories 107 per oz.
Four Figgerrolls weigh approx. 1 oz.

TRADE TERMS
12 x 30 roll packs 24/- per case
24 x 10 roll packs 23/- per case
Order from your usual wholesaler

WHITWORTHS HOLDINGS LIMITED
WELLINGBOROUGH
NORTHANTS

1. SELLING IN THE CINEMA





Make hay while the stars shine

Who are today's big spenders?

The young unmarried people between 15 and 25.

And where can they best be reached with a sales message, held captive, and sold?

In the cinema.

This section of the population is spending something over £900 millions a year. Since 1938 their earnings have doubled. Their numbers are increasing. They do not habitually read newspapers or watch television, but 99% of them go to the cinema.

Reaching the big spenders

There are currently about 3,500 cinemas in this country at which cinema commercials are shown. PEARL & DEAN have rights in nearly half of these.

Prices are *fixed* at 6/- per 15-second commercial per 1,000 viewers. At this rate, £1,500 will buy a 15-second film for an audience of 5 million; the same sized audience can watch a two-minute commercial for £6,875.

Localising a Campaign

You can choose your areas to tie-in with your campaigns, make your sales where most wanted, appeal specifically to users and potential users of your product.

Sell in the cinema through

Pearl & Dean

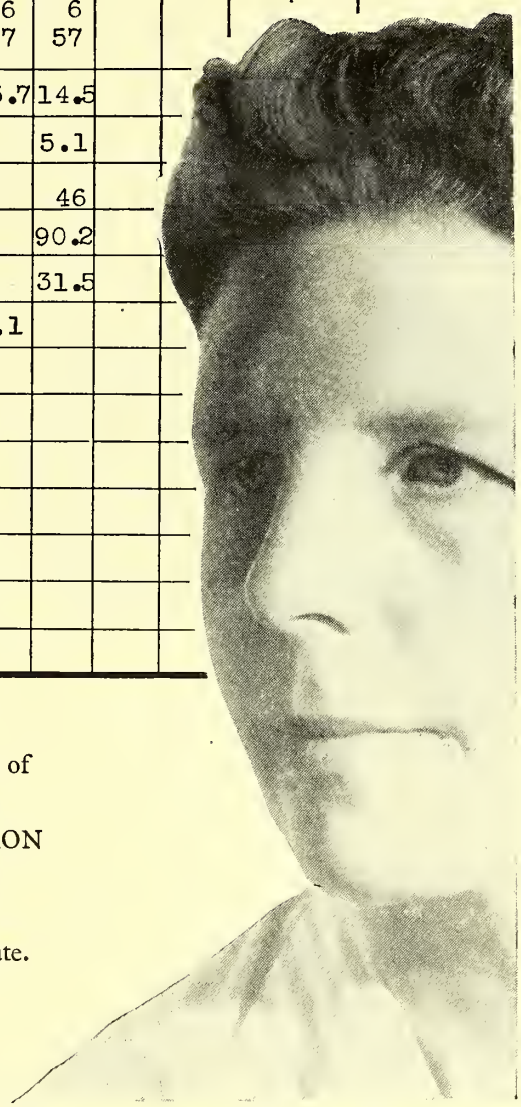
33 DOVER STREET, LONDON, W.1
MAYFAIR 7494
& 3 THE PARSONAGE, MANCHESTER, 3
BLACKFRIARS 6804

An improved form of LIQUID ORAL IRON **Sytron**

IRON DEFICIENCY ANAEMIA—CASE REPORT

AGE 37	SEX F	NAME Anne Doris Browne
KNOWN BLOOD LOSS None Normal periods		DOSAGE OF IRON AND DATE OF STARTING THERAPY Sytron ℥ii t.i.d. p.c. 8/5/57

HAEMATOLOGICAL EXAMINATIONS	Dates	7 5 57	14 5 57	21 5 57	28 5 57	4 6 57	12 6 57
Hb.g./100 ml.		7.7	9.0	11.2	13.0	13.7	14.5
R.B.Cs. m./c.mm.		3.67					5.1
P.C.V. %		25					46
M.C.V. c.μ.		68.1					90.2
M.C.H.C. %		30.8					31.5
Reticulocytes %		0.3	2	3.2	5.3	2.1	
W.B.Cs./c.mm.		7,300					
Polymorphs		66					
Lymphocytes		31					
Monocytes		3					



SYTRON* is a pleasant cherry flavoured elixir containing in two teaspoonfuls the equivalent of 55 mg. of iron as a chelate, sodium ironedetate. It has little or no astringent taste and is well tolerated by children. SYTRON does not stain the teeth and in its recommended dosage seldom causes intestinal irritation.

SYTRON contains in 8 ml., 380 mg. Sodium Ironedetate.

Available in bottles of 4, 16 and 80 fluid ounces

* TRADE MARK

PARKE, DAVIS & COMPANY (*Inc. U.S.A. Liability Limited*), Hounslow, Middlesex. *Telephone:* Hounslow 2361

1032

Fighting "MANAGEMENT FATIGUE" means BUSINESS

There will be many among your customers, holding responsible positions in all walks of life, whose lives are overshadowed by the lowered state of mind and body now known as "management fatigue". This, the legacy of tension, overwork, snatched and ill-balanced meals, is a major problem of today. But just as 20th-century conditions combine to create it, 20th-century science has evolved, in OKASA, the means to solve this problem.

As befits a modern tonic, specifically designed for busy people, OKASA is prepared in tablet form. Its ingredients are most carefully combined to provide a comprehensive treatment—to strengthen not merely a part, but the whole of the human constitution. By virtue of its new composition, OKASA also qualifies as a geriatric product of the highest order. To people seeking vigorous enjoyment of their later years, as well as to people of all ages living under pressure, OKASA will be of vital and immediate interest.

OKASA the 20th-Century Tonic

STANDARD SIZE (100 TABLETS) 24/6
(To the Chemist 16/4)

TRIAL SIZE (50 TABLETS) 14/9
(To the Chemist 11/2)

OKASA is prepared by Hormo-Pharma Ltd. London, and is obtainable from your Wholesaler, or from the Wholesale Department of

ROBERTS CHEMISTS (Bond St.) LTD.
76 New Bond St. London, W.1. Tel: MAY 4173

EARLY ORDERS 14 to the DOZEN

Attractively packed. Informative brochure available for free distribution to your customers. Eye catching counter card. Phased advertising programme to stimulate demand.



When conditions require the lowering of arterial tension

MBL

DETENSYL
Vegeto-Polyhormonic Hypotensor
is the treatment required

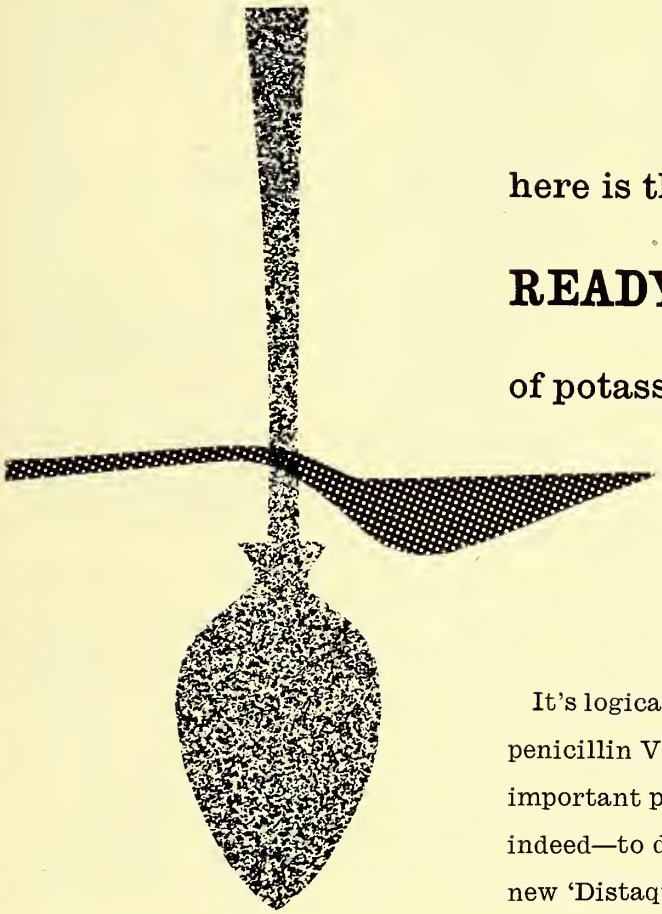
DETENSYL is another of the M.B.L. preparations which has been accepted by doctors in many countries. In various indications associated with blood pressure, regular administration restores normality. A small, periodic dosage is recommended for maintenance.
DETENSYL contains mistletoe, liver, pancreas and lung substances. More than a palliative, it re-educates the endocrine glands, allowing them to resume their regulation of the arterial tension.

INDICATIONS

Conditions frequently associated with blood pressure, such as **Menopausal Disturbances, Arteriosclerosis, Sclerosis of the Kidneys, Persistent Cephalagia, Arthritis and Auditory and Ocular Troubles,** respond to DETENSYL therapy and almost inevitably disappear with the lowering of arterial tension.

MEDICO-BIOLOGICAL LABORATORIES LTD.
LONDON S.E.25
Sole Distributors for the U.K: ARCHER LABORATORIES LTD., CARGREEN ROAD, LONDON, S.E.25

PB30



here is the first

READY-PREPARED Suspension

of potassium penicillin V

a most efficient
oral penicillin
...in a most
acceptable form

It's logical enough that the pioneers of Britain's penicillin V should be first again with another important penicillin development. For important indeed—to doctor and pharmacist alike—is the new 'Distaquaine' V-K Suspension. It is Britain's first *ready-prepared* suspension of potassium penicillin V, and can be dispensed without any preliminaries. It is pleasant-tasting, too, and is suitable for patients of every age. That's why you'll be seeing more and more prescriptions for . . .

DQV-K SUSPENSION

'Distaquaine' V-K

(POTASSIUM PENICILLIN V)

125 mg. per 5 ml. in bottles of 60 ml. (approx. 2 fl. oz.). Trade Price—8s. 10d.

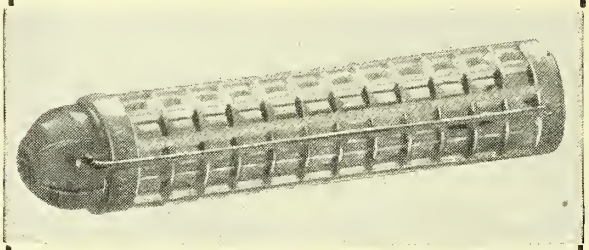
DC(B)L **THE DISTILLERS COMPANY (Biochemicals) LIMITED**

BROADWAY HOUSE, THE BROADWAY, WIMBLEDON, LONDON, S.W.19 Telephone: LIBerty 6600

Owners of the trade mark 'Distaquaine'

PPH15/59

NOVELTY HAIR ROLLER
'FABULO' BRAND



The world's best and cheapest UNBREAKABLE (polythene) HAIR ROLLER or CURLER in 4 sizes for professional use by Hairdressers, for use with Home Perms or simply by damping the hair.

Size 0 = **12** in Cellophane pkt. (very attractive) 2½" long
Size 1 = **7** " " " " " 3" "
Size 2 = **5** " " " " " 3½" "
Size 3 = **3** " " " " " 3" " *(very thick)*

Price 15/10 per doz packets of either + **25%** P.T.
Min. Retail Price **2/5** per packet of either size

Supplies obtainable through the wholesale trade or direct from:

HAETAM LTD.
63 Corporation St., Manchester 4
Telephone: Blackfriars 3882

Wholesalers who do not yet stock these renowned Curlers please contact us for trade terms.

THOVALINE

for:—

BEDSORES

BEDSORES can be prevented by applying **THOVALINE** before the trouble starts but if already in existence will help greatly in healing.

BURNS

BURNS Unique action. **THOVALINE** is self sterile it eliminates pain and is a rapid healer.

DERMATITIS

URINE DERMATITIS Excellent healing properties where rash exists and will prevent such trouble occurring if applied beforehand. Offensive odour is eliminated.

Supplies from your usual wholesale house:

ILON LABORATORIES

LORNE STREET · HAMILTON · LANARKSHIRE
Tel: HAMILTON 410

JKL

BOTANICALS
CHEMICALS
GUMS

ESSENTIAL OILS
SPICES
WAXES

★

CASCARA
IPECAC
SENEGA
STYRAX
STROPHANTHUS

NEW YORK HAMBURG

★

JOHN KELLYS (LONDON) LTD.

24 OLD BROAD STREET, E.C.2.

Telephone: LONdon Wall 6585 (4 lines)
Telegrams: "Ergotine, Stock, London"

Quinine Sulphate B.P. 1953 & 1932

✳

THE BRITISH
DYEWOOD COMPANY LTD.
19 St. Vincent Place,
Glasgow, C.1.



NEW SHAPE FITS ALL HEAD SIZES

Submarine REGD. SWIMMING CAPS

This entirely new universal shape fits all head sizes. It takes the place of the former small/medium, and medium/large sizes and enables a greater variety of colours and styles to be held without increasing stocks. All Submarine swimming caps are now made in this new shape.

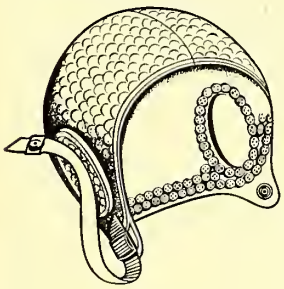
The new universal size demands:

(a) A high quality cap that will stretch easily.

(b) A cap that is the natural shape of the head *and the neck* i.e. it is moulded with a high front and a deep back. When the cap is worn on a large head the back will be in a normal position, but with a smaller head the back will be lower down the neck, where it will still fit snugly and *comfortably*.

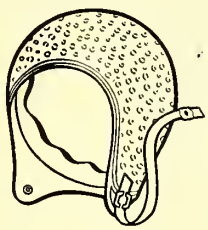
Although rubber prices have advanced substantially, last year's prices are maintained

2/6 — 6/6



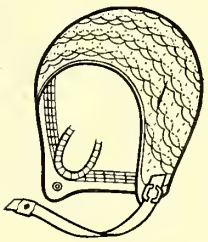
TRIDENT

This watertight swimming cap has internal suction cups which hold the cap snugly and comfortably to the head, and earpieces to protect the ears from pressure. The most comfortable swimming cap in the world. Packed in an attractive film window display carton. 12 to a display outer. 6/6 Retail.



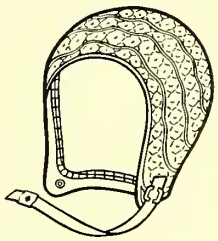
SEAL

The inner flange forms an air pocket, keeping the hair completely dry. Because of the internal construction this cap is still made in the small/medium and medium/large sizes. Sleeve packed for easy handling and display. 12 to a display box. 4/9 Retail



PENGUIN

This popular swimming cap is obtainable either with or without strap. Each cap is in a polythene bag. 12 to a display carton. 3/6 Retail



STANDARD

Fitted with water-excluding ridges. Packed in boxes of 12. 2/11 Retail.

CLIPPER 2 (Strapless)

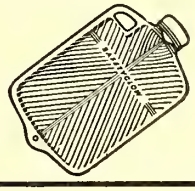
Fitted with water-excluding ridges. Packed in boxes of 12. Universal and Large Sizes only. 2/6 Retail.

Sizes: In addition to the UNIVERSAL SIZE there is a LARGE SIZE which caters for wearers who have extra large heads or very abundant hair, and a Junior size for children, throughout the range. Every cap fully guaranteed.

W. W. HAFFENDEN LTD.
RICHBOROUGH RUBBER WORKS
SANDWICH · KENT
Telephone: Sandwich 3381

SUBMARINE HOT WATER BOTTLES

A complete range at competitive prices with metal or rubber stoppers. Every bottle fully guaranteed.



When you look into it



there is no better relief for a "stuffy nose" than

NEOPHRYN* trade mark

This time of year most people suffer that "can't breathe" feeling through colds, catarrh or sinusitis. There will be a great demand for the safe, quick, lasting relief of Neophryn. Make sure you have a sufficient supply. Retail price 3/6d.

* (*1-m-hydroxy-∝-methylaminomethyl benzyl alcohol hydrochloride*).

BAYER PRODUCTS LTD., Kingston-upon-Thames, Surrey.
Associated Exporting Company: **WINTHROP PRODUCTS LTD.**

MAKE IT A UNIC YEAR

by stocking now this fabulous Swiss Battery Shaver retailing at only

58/10

INCLUDING 8/10 PURCHASE TAX

Trade Terms 27½%

Immediate Delivery

Uses ANY standard 1½ volt battery



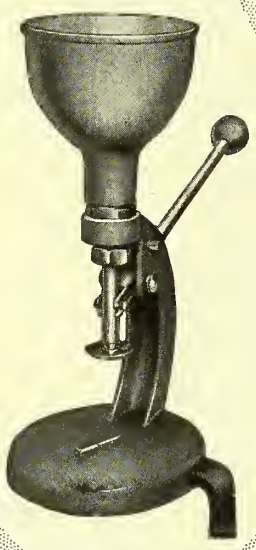
We stock and supply the famous Swiss Leclanché battery which provides up to two months shaving, and retails at 2/- (extra) less 27½%.

PLEASE ORDER TODAY PREFERABLY THROUGH YOUR USUAL WHOLESALER OR DIRECT FROM—

Sole Distributors:

London and the South : **HAYNOR LIMITED**
167 Greyhound Road, LONDON, W.6

Midlands, North and Scotland : **H. LONGWORTH & CO.**
28 King Street, MANCHESTER, 2



profits up...
...costs down

Here is your chance to make
up your own products by using the

QP LABORATORY EMULSIFIER

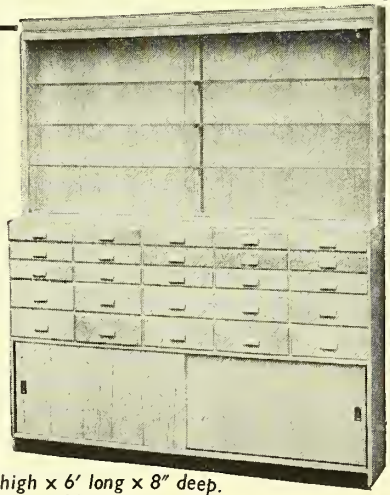
Strong and well designed this emulsifier
will pay for itself many
times over

PRICE **£8.12.6d.**
5% discount for cash with order

ORMEROD ENGINEERS LTD.
HOLLOWS WORKS SHAWCLOUGH, ROCHDALE 'phone : Rochdale 49321 'grams : Homogeniser Rochdale

NORLAND INTERIOR DISPLAY UNITS

Here is the
NORLAND
"CU"
Oak
Wall Fitting
Ideally Suited
for
Photographic
Supplies



SIZE : Top Section 7′ high x 6′ long x 8″ deep.
Bottom Section 3′ 9″ high x 15″ deep.

Bottom Section of Unit incorporates 25 Fitted Drawers and Middle Standard with shelf on either side enclosed by flush Oak Sliding Doors (to a height of 22″). Display Section : Polished Oak interior with 3 adjustable Glass Shelves enclosed by Rimless Glass Sliding Doors.

Ex Works **£70. 0. 0.**

LIDDLE KEEN & CO., LTD.
NORLAND YARD, LONDON, W.11. Tel : PARk 9881/2

PRIDE 7D



NEW DOUBLE SHAMPOO SACHETS

BEER SHAMPOO
a special Blend for BRUNETTES which helps to attain that much sought after high gloss so necessary with either natural or tinted BLACK hairs.

CHAMPAGNE SHAMPOO
is specially packed for those who desire the invigorating effect of wine and spirit with a lovely FRENCH PERFUME.

MEDICATED SHAMPOO
a hair health shampoo free of all harsh antiseptics. Based entirely on the Pure Natural Oils of the Pine and Ti-Trees is delightful to use and assures a clean healthy scalp.

These three shampoos are in double sachets giving sufficient for 2 complete shampoos. Smart and colourful pack.
Price **3/10** doz. plus **11½d.** P.T. retail **7d.** each.

From May, Roberts, Sangers or your usual wholesaler or direct

B. N. FURMAN (Productions) LTD.,
133 Fonthill Road, N.4



Customers come back for more



Vitavel Syrup is one of the most effective vitamin supplements it is possible to offer your customer over the counter . . . and one of the most delicious. Containing vitamins A, B_1, C and D and an orange base with glucose, it is particularly effective after illness and other debilitating conditions and is greatly liked by customers of all ages.

Vitavel Syrup combines effective action and attractive taste

VITAVEL SYRUP

One fluid ounce contains at time of manufacture:—

VITAMIN A 20,000 I.U. • VITAMIN D 3,000 I.U. • VITAMIN B_1 4 MG.
VITAMIN C 80 MG. • LIQUID GLUCOSE B.P. 25% W/V.

Basic price to N.H.S. 6 fl. ozs. 2/6, 40 fl. ozs. 16/- **You make 1/3 profit on each 6 fl. oz. bottle sold**

VITAMINS LIMITED (DEPT.AA.I.) UPPER MALL, LONDON, W.6

Restrictive Trade Practices Act 1956
FIXED RETAIL PRICES 1/10—3/7 Including Purchase Tax
The maintenance of these prices is a condition of sale

Dr. J. Collis Browne's
CHLORODYNE

SALE RESTRICTED
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BUSINESSES WANTED

PHARMACEUTICAL and Toiletry Company with a sales force of not less than ten or national coverage is required for outright purchase, strict confidence observed. Box C 5139.

APPOINTMENTS

CELL BARNES HOSPITAL, ST. ALBANS, HERTS
Dispensing Assistant

required. Small modern hospital for mental defectives within easy reach of London. Salary scale £395 to £510 p.a. according to age. Additional payment if holding Apothecaries' Hall Certificate. House accommodation available. Apply to Medical Superintendent. C 5123

CHARING CROSS GROUP OF HOSPITALS, FULHAM HOSPITAL, ST. DUNSTANS ROAD, HAMMERSMITH, W.6
Assistant-in-Dispensing

Whitley scale of pay and conditions. Applications to Secretary. C 5147

KENT COUNTY OPHTHALMIC AND AURAL HOSPITAL, MAIDSTONE
Locum Chief Pharmacist

required for period 30th May to 11th June, 1960. Salary 18 gns. weekly.
Applications with names and addresses of two referees to the Group Secretary, Mid-Kent Hospital Management Committee, 103 Tonbridge Road, Maidstone. C 5127

LEYTONSTONE (No. 10) HOSPITAL GROUP, WHIPPS CROSS HOSPITAL, LONDON, E.11 (Category V Hospital)
Pharmacist

Applications are invited for the above post. Applications for part-time Pharmacists will be considered. The hospital is ideally situated, being on the Central Underground Line within 20 minutes of Central London.
Application forms from the Hospital Secretary, to be returned as soon as possible. C 492

BOTLEYS PARK HOSPITAL, CHERTSEY, SURREY
Assistant-in-Dispensing

required to assist Chief Pharmacist in pleasant easily run department. Whitley Council scale applies. Applications to Physician Superintendent. C 5145

MANSFIELD HOSPITAL MANAGEMENT COMMITTEE
Senior Pharmacist

required as soon as possible for the modern Group Pharmaceutical Department at the KING'S MILL HOSPITAL, SUTTON-IN-ASHFIELD, NOTTS.
Salary in accordance with the Whitley Council scale. The hospital is situated on the outskirts of Mansfield in pleasant surroundings (14 miles from Nottingham). The department is of modern design and fully equipped, and may be seen on application to the Group Pharmaceutical Officer. Accommodation available for a single person. Apply to the Group Secretary, Mansfield H.M.C., "Oak Bank," Crew Hill Drive, Mansfield, Notts. C 5095

NELSON AND WIMBLEDON HOSPITALS, LONDON, S.W.20
Locum Assistant-in-Dispensing

required (March 19 to 26, inclusive) for duties at the above hospitals.
Salary £10 per week, if holding certificate of Society of Apothecaries of London, otherwise £9 11s. 6d. Applications, with full particulars, to the Group Pharmacist, St. Helier Hospital, Carshalton, Surrey. C 5129

NEW CROSS GENERAL HOSPITAL, AVONLEY ROAD, S.E.14
Pharmacist

required at the above hospital.
Interesting work in connection with beds closely associated with Guy's Hospital.
Salary and conditions in accordance with Whitley Council Agreement.
Applications, together with names of two referees, to the Hospital Secretary at the above address within one week of advertisement. C 5090

READING & DISTRICT HOSPITAL MANAGEMENT COMMITTEE
Pharmacist

required at the Royal Berkshire Hospital, Reading (Category V). Six pharmacists with full supporting staff. Frequent five-day weeks. Commencing salary, new entrants, up to £730 p.a. based on previous professional experience and National Service after qualifications. Applications to Group Pharmacist, Royal Berkshire Hospital. C 5128

PRINCESS BEATRICE HOSPITAL, EARL'S COURT, S.W.5
Assistant-in-Dispensing

required now in busy general hospital. Whitley Council scale. Apply House Governor. C 5126

ROWLEY BRISTOW ORTHOPAEDIC HOSPITAL, PYRFORD, WOKING, SURREY
Locum Pharmacist

required, single-handed; mornings only (9 a.m. till 1 p.m.) for two weeks either from August 22 or August 29. Residential accommodation available for a female applicant. Salary: £2 3s. 8d. per session. Apply: Secretary. C 5040

ST. ALBANS CITY HOSPITAL (394 Beds), NORMANDY ROAD, ST. ALBANS, HERTS
Senior Pharmacist (Category III)

A vacancy will occur 1st April, 1960, at the above General Hospital within easy reach of Central London. Whitley Council salary and conditions.
Applications stating age, qualifications and experience, together with the names of two referees to the Chief Pharmacist. C 507

STOCKPORT AND BUXTON HOSPITAL MANAGEMENT COMMITTEE, STEPPING HILL HOSPITAL, STOCKPORT (528 beds)
Senior Pharmacist

Applications are invited for the above post. The department provides a service to other hospitals in the Group and offers wide experience in pharmaceutical practice.
Applications, with full particulars and the names of two referees, to be addressed to the undersigned.

E. J. DURRANT,
Group Secretary.

59B Shaw Heath,
Stockport. C 5130

ST. LAWRENCE'S HOSPITAL, CATERHAM, SURREY
Assistant-in-Dispensing

required. Salary at age 21, £320 per annum, at age 22 and over £395 per annum rising to £510 per annum (scale under review). £20 per annum allowance if holding approved qualification. Residential accommodation for a single person. Apply immediately, stating age, qualifications, with details of experience and education, together with names of two referees, to Group Secretary. C 5134

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Appointments—Continued

STEPPING HILL HOSPITAL, STOCKPORT
Locum Pharmacist
required immediately. Applications to the Group Secretary, Stockport and Buxton Hospital Management Committee, 59B Shaw Heath, Stockport. C 5131

ST. HELIER HOSPITAL, CARSHALTON, SURREY
(763 beds)
Assistant-in-Dispensing
required for general dispensing duties in busy department. Experience of sterilising techniques an advantage. Canteen facilities available. London Weighting payable. Applications with the names of two referees to Secretary. C 5136

SPRINGFIELD HOSPITAL, LONDON, S.W.17
Senior Pharmacist
required. Whitley Council salary scale and conditions of service. Applications immediately to Group Secretary, giving age, qualifications, details of experience and names of two referees. C 5141

ST. OLAVE'S HOSPITAL, LOWER ROAD, ROTHERHITHE, S.E.16
Senior Pharmacist
Applications are invited for appointment at the above hospital. Salary up to £895 per annum including London Weighting. Applications stating age, qualifications and experience and giving the names of two referees to the Hospital Secretary. C 510

ST. OLAVE'S HOSPITAL, LOWER ROAD, ROTHERHITHE, S.E.16
Assistant-in-Dispensing
Required in Pharmaceutical Department for varied duties. Salary up to £560 per annum including London Weighting and additional payment of £20 per annum for suitable qualifications. Apply giving names of two referees to the Chief Pharmacist, telephone: BERmondsey 4311. C 509

WEST MIDDLESEX HOSPITAL, ISLEWORTH, MIDDLESEX
Assistant-in-Dispensing
required in Pharmaceutical Department for varied duties. Salary £395 per annum at age 22, rising to £510, plus London Weighting (additional payment of £20 per annum for suitable qualifications).
Apply giving names of two referees to the Chief Pharmacist. C 480

WEST PARK HOSPITAL, EPSOM, SURREY
Assistant-in-Dispensing
(with Apothecaries' Hall Certificate) required in active psychiatric hospital. Salary and conditions of service in accordance with National Health Service Regulations. Applications with the names of two referees should be sent as soon as possible to the Group Secretary, who will be pleased to provide further information on request. C 5138

YORK "A" AND TADCASTER HOSPITAL MANAGEMENT COMMITTEE
Pharmacist
required for County Hospital, Monkgate, York. Salary scale £605 x £30 (3) x £35 (1) x £30 (2) x £25 (1) to £815 p.a. plus £25 p.a. higher qualification allowance (e.g., F.P.S., A.R.I.C.). Applications stating age, qualifications, experience and names of two referees to Group Secretary, Bootham Park, York. C 5137

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RETAIL (HOME)

DISPENSARY ASSISTANT (unqualified) required by the Army & Navy Stores, Ltd. Half-day Saturday. No late evenings. Apply Staff Office, 12 Artillery Row, Victoria, S.W.1. C 5135

HIGH-CLASS PHARMACY requires a qualified lady to take charge of dispensing. Box C 2670.

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C 2699

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A substantial Group of British Companies of high standing in the medical and pharmaceutical fields wish to recruit young men of calibre for career appointments in their Sales Division.

Applications are invited from men between the ages of 25 and 40 who are interested in the welfare of people and preferably with a basic qualification in, or understanding of, any one of the following: pharmacy, chemistry, biochemistry, physiotherapy, medical auxiliary or veterinary work. High personal qualities in appearance, self-confidence, intelligence and the will to succeed are the prime considerations.

A comprehensive training will be given over a period of several weeks in the Group's products and business methods, after which candidates will be given responsibility, under guidance, for the development of sales to doctors and chemists on selected territories in various parts of the United Kingdom.

Salary in the scale £800 to £1,300 per annum according to age and experience plus car, commission, bonuses, expenses and generous pension scheme benefits.

The appointments to be filled represent first class opportunities to join a progressive and go-ahead Group which rates as one of the finest employers in British Industry to-day. Please write fully and in confidence, quoting reference DR/60 to:—

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C 2706

LIVERPOOL retail chemists require branch manager. Salary £1,000 p.a. plus bonus. Normal shop hours. No rota duties. Assistance given with accommodation if necessary. Box C 2684.

LONDON, W.1. Pharmacist, lady or gentleman, required as superintendent manager. Half-day Saturday. No rota duties. Hours: 9 a.m. to 6.30 p.m. Permanency. No accommodation. Good salary. Write to Mr. H. T. Stevenson, Schliephak & Stevenson, Ltd., Chemists, 42 Charlotte Street, London, W.1, giving full details of experience, age, etc. C 2698

NORTH LONDON. An opportunity occurs for a Pharmacist to take over the Director-Managership of an old-established business with very good living accommodation attached. The position also offers excellent scope for advancement. Good basic salary and annual bonus according to net profit, and after an initial period, the applicant will be given the option of acquiring shares in the Company. This is a really progressive position for a family man wishing to settle in the London area. Further particulars upon application to A. Aldington, M.P.S., 497 Seven Sisters Road, London, N.15. Telephone Stamford Hill 4876. C 508

PHARMACIST. Manager or Manageress required for new suburban branch. First-class conditions. Good supporting staff. Superannuation scheme. Salary according to N.P.O.W. scale plus other emoluments. Living accommodation available if desired. Applications to be made in writing stating experience to Superintendent Chemist, Birmingham Co-operative Chemists, Limited, 422/424 Coventry Road, Birmingham, 10. C 2695

OLDHAM CO-OPERATIVE CHEMISTS, LTD., invite applications for the position of pharmacy branch manager, either sex. Modern accommodation available if necessary. Superannuation. Salary and other emoluments at least £960. Applications giving age, experience, etc., to Oldham Co-operative Chemists, Ltd., King Street, Oldham. C 454

The BIRMINGHAM CO-OPERATIVE SOCIETY LIMITED

invites applications from Pharmacists for the position of

ASSISTANT SUPERINTENDENT CHEMIST

The Department comprises twenty-eight Chemist and Drug Branches, together with an Optical Section. Annual sales are £409,000. Application form and further information supplied on request. Completed application form, endorsed "ASSISTANT SUPERINTENDENT CHEMIST," must be received by the Secretary, Birmingham Co-operative Society Limited, High Street, Birmingham, 4, not later than Monday, 22nd February, 1960. C 2685

PHOTOGRAPHIC SALES ASSISTANT required. Good chance for young man with some retail experience. Write "City Sale," 64 Cheapside, E.C.2. C 2657

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2. **Leicester and South Staffordshire.**
3. **Northumberland and part of Durham.**

Good salary, exceptional pension scheme, full expenses; successful applicants are assisted to own their own cars. First-class candidates desiring success and security should apply with full details to the Secretary, Roche Products Limited, 15 Manchester Square, London, W.1. Applications will be treated as confidential.

C 5132

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Write in confidence, giving fullest particulars of territories covered and lines already carried, together with number of representatives employed. Box C 2696.

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Situations Vacant—Continued

WEST END. Unqualified assistant, senior, for pharmaceutical counter in well-known Bond Street chemists. First-class experience and references essential. Languages an advantage, excellent salary. Half-day Saturday. Apply: Roberts Chemists (Bond Street), Ltd., 76 New Bond Street, W.1. Mayfair 4173. C 2686

LOCUMS WANTED

LOCUM PHARMACIST REQUIRED May 23 to September 17 inclusive. Applications to Superintendent Chemist, Birmingham Co-operative Chemists, Ltd., 422-4 Coventry Road, Small Heath, Birmingham, 10. C 2687

PHARMACIST Locum required for any fortnight in July 1960. Accommodation or transport arranged. State salary. Light duties suitable for retired pharmacist. Apply: A. M. Clark, Ltd., Chemists, Penistone, nr. Sheffield. Phone: Penistone 3103. C 2629

RETAIL (OVERSEAS)

PHARMACIST REQUIRED, end of April, to manage modern, steadily expanding branch shop in Umtali, Southern Rhodesia. Delightful surroundings, reasonable cost of living, good prospects for the right person. Box C 2707.

QUALIFIED CHEMIST required for retail pharmacy in Southern Rhodesia. Salary to commence £100 per month. One calender month's leave each year accumulated if desired up to three years. Interviewing will be arranged second week in March. Write: Chemist, c/o Warden & Hotchkiss, Ltd., 41 Clement Street, Birmingham, 1. C 500

WHOLESALE

FREE-LANCE REPRESENTATIVE required to take up two Dutch pharmaceutical lines (extremely popular on Continent). Good commission. Telephone: 10 to 1, HENdon 9449. (Ursula-Ruth, Ltd., Pollard Road, London, N.W.9.) C 5142

EXPERIENCED REPRESENTATIVE required for well-introduced wholesale fashion jewellery warehouse in the North to carry jewellery as an additional line, on commission basis. Car and references essential. Box C 5011.

ABBOTT LABORATORIES, LTD., have vacancies for young pharmacists in their development section concerned with formulations of new products. Experience not essential but candidates must possess initiative and have aptitude for this type of work. Five-day week, pension scheme, etc. Apply, the Secretary, Ref. H. L., Abbott Laboratories, Ltd., Bede Trading Estate, Jarrow-on-Tyne, co. Durham. C 2583

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Power Road, Chiswick, W.4

The continued expansion of this company manufacturing perfumery and flavouring essences has created vacancies within our Compounding Departments for assistants with dispensing experience. Successful applicants would be appointed to either our Chiswick or Feltham factories and would be assured of good working conditions with five-day week. Applications should be made in writing to the Chief Chemist. C 2705

LEEDS WHOLESALE CHEMISTS' SUNDRIES DEPARTMENT. A young lady required as Senior Assistant. Applicant to be fully experienced in pharmaceutical sundries, toilets, etc., knowledge of stock control, order assembly and despatch. Prepared to control and train staff. State age and experience. Apply in writing to: Secretary, P.D.S. (Leeds), Limited, Wholesale Chemists, 1 Howarth Place, off Camp Road, Leeds, 7. C 2697

ORRIDGE & CO., 184 Strand, London, W.C.2, require stocktakers. Must have knowledge of trade but need not necessarily have done stock-taking although this is an advantage. Excellent wages and prospects. Write in first instance or telephone Temple Bar 9112, Ref. WMS. C 5084

PROCESS AND GENERAL WORKER required for cosmetic factory, S.E.1 district. Factory chemist would be prepared to train an intelligent chemist's assistant (male). Phone: Factory Manager, Waterloo 6955, for appointment or write Box C 2694.

LARGE PUBLIC COMPANY

manufacturers of pharmaceutical and chemical products

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SALES MANAGER

must have extensive experience particularly in the Chemist and Grocery Trades, and be capable of promoting Sales Policy and managing Area Representatives.

High salary offered for first-class man.

Apply Box T.2956/7, c/o Foster, Turner & Everetts, Ltd., 11 Old Jewry, London, E.C.2. C 5107

OLD-ESTABLISHED DRUG HOUSE, North London area, requires (a) Pharmacist or chemist with pharmaceutical experience for analytical and production control; salary by negotiation in line with present standards. (b) Foreman in wet filling department, experienced, energetic man with initiative and ability to organise and control, wages £13—£14 per week. (c) Unqualified assistant as Stock Room Supervisor or Order Assembler and Checker, £10—£12 per week according to calibre. (d) Young, energetic experienced Laboratory Charge Hand, sound knowledge of galenical manufacture and spirit work, early prospect of promotion to foreman. £10—£12 per week. Industry and conscientious service rewarded. Suitably experienced applicants are invited to apply to AYD/CGP, Box C 2692.

REPRESENTATIVES

already in contact with Hospitals, Wholesale and Retail Chemists, required immediately for Surgical Hosiery firm. Areas:—Midlands and Southern England. Commission basis. Replies to Box C 2689.

REPRESENTATIVE REQUIRED for introduction of new products to the medical profession. Full details of experience and salary required to Box C 5133.

Situations Vacant—Continued

REPRESENTATIVE REQUIRED, already calling upon chemists by old-established cork manufacturers. Commission basis only. Box C 2688.

SOUTHAMPTON. Unqualified assistant (male) required for the wholesale and shipping department of an old-established company. A knowledge of Ministry of Transport Shipping Scales is desirable, as the successful applicant will be required to board ships to meet the doctor for the purpose of checking medical requirements. Applications in writing giving full particulars of age, experience and salary required to: W. Bates & Co., Ltd., Unity Chambers, Latimer Street. C 2682

STARTING salary of £800 per annum, substantial commission potential, company car expenses and other benefits are offered to salesmen of ability aged 23-35 years who have had a successful sales record selling to chemists or hairdressers. There are excellent prospects of early promotion in our rapidly expanding group of companies selling heavily advertised toiletry products under an internationally famous brand name. Due to expansion there are immediate vacancies in the Midlands, N.E., Home Counties and London areas. Send full particulars to Box C 2704.

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The United Chemists Association, Ltd., in accordance with their general policy of expansion will shortly be appointing

2 Representatives

for the Lancashire and Yorkshire areas. The appointments provide for men with initiative, energy and enthusiasm. Preference will be given to Fellows or Members of the Pharmaceutical Society, but this is not essential, providing the applicant has had a sound Pharmaceutical training or previous selling experience.

The positions carry a good salary, commission, company car, expense allowance, and an excellent pension scheme.

AGE 25–40

Apply in confidence to the Sales Manager, United Chemists Association, Ltd., Ucal Works, Cheltenham. C 5116

VERITAS DRUG COMPANY, LTD.,

an established ethical House, who have previously distributed their products solely through an agent, have now completely reorganised their plant and offices in the London area. Resulting from this "face lift," they are now looking for medical representatives in London, the provinces and Scotland.

For men who are tired of being small cogs in very large wheels, this is a unique opportunity to join a small but energetic and progressive Company with ambitious plans for the future.

Applicants should be between 23/40 years of age, preferably with experience of detailing ethical products to the medical and pharmaceutical professions. A generous starting salary is offered, all expenses will be paid and a new car provided.

Applications in writing, with fullest details and a recent photograph (returnable), should be addressed in confidence to:—

The General Manager,
Veritas Drug Company, Ltd.,
223 Kensington High Street,
London, W.8.

C 2691

STOCKTAKER with some retail or wholesale experience (not necessarily in stocktaking itself) required by well-known firm of professional Valuers; good basic salary which will be supplemented by a bonus. The position also offers excellent prospects in return for efficient service. Please write, initially, under guaranteed assurance of confidence, with brief details of career to date and stating present salary to Box C 505.

WHOLESALE (OVERSEAS)

AN INTERESTING opening exists within a small but expanding toiletry and medicine manufacturing unit which is part of a large and progressive British organisation in Nigeria. The position is likely to appeal to a versatile and adaptable young man of enterprise aged between, say, 23 and 33. Whilst no specific qualification is strictly required, the broad nature of the duties to be performed would be of special interest to a man who has had experience at supervisory level in at least some of the following: Toiletries and medicine manufacture, basic machinery maintenance, elementary work study, labour control, office administration, stock control and product development. An initial contract of 18/24 months would be offered with the prospect of a longer term engagement by mutual consent possibly in a somewhat different sphere. The position carries a minimum four-figure salary. Additional benefits include family allowances and passage to and from Africa, free furnished accommodation, kit allowances, and free medical services. Interviews in London. Write giving full details of previous experience to Box C 5144.

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THE MANUFACTURERS of old-established and well-known branded chemical sundries lines, supported by extensive national advertising, are reorganising their sales organisation. Agents of good reputation in all areas of the U.K. are invited to apply with full particulars. Box C 2690.

SITUATIONS WANTED

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REPRESENTATIVE, 36 years' experience active selling nationally advertised products to doctors, hospitals, chemists, P.H.D's, etc., including training sales staff. Requires work, associated with active or instructional selling. Good agency considered. Own car. Box C 2651.

REPRESENTATIVE (35), car owner, wide experience amongst chemists and stores, in Derby, Leicester, Lincs, Northants and Notts. Desires full-time appointment with reputable house. Drug, Cosmetics, or Perfumery. Box C 2672.

YORKSHIRE area, energetic salesman, own car, large live connection wholesale, co-ops and retail, open to represent reputable company. Box C 2693.

AGENCIES WANTED

AGENT with sound chemists' connection in Lancashire and Cheshire has lately relinquished main agency and could devote ample time to introducing new or established product(s) of outstanding merit. Commission basis. Box C 2700.

REPRESENTATIVE, 30 years' experience calling on pharmacists, wholesale and retail, free lance, North-west area, Liverpool, Wirral, and North Wales, including Shropshire, interested in additional line. Box C 2680.

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RUBBER BUNGS in many standard sizes and qualities or to specification. Esco (Rubber), Ltd., 34/36 Somerford Grove, London, N.16. C 511

A BARGAIN. — £25 complete, BRAND NEW READY-MADE COMPANY REGISTRATIONS. GUARANTEED NO TRADING (England and/or Scotland), all trades available now, including Chemists; Fancy Goods; Photography; Investment; General Merchants and all other trades. Write, phone or call (for English Registrations)—Business Economy Co., Regns., Ltd. (Dept. T/9), 156 Strand, London, W.C.2. (Tem. 8377/2294); (for Scottish Registrations) to 19 Walker Street, Edinburgh, 3, (Cal. 1167/9); Read "Advantages of Trading as a Limited Company" (3/- post free); Ltd. Co. may save you tax. We also have seven day Company Registration with your own choice of name, twenty guineas, particulars on application. C 506

ARGENTINE. Large Buenos Aires concern with modern well equipped plant and laboratory interested in manufacture of ethical and medical specialities, cosmetics, perfumes, etc., on behalf of local principals or agents. Write Box 5393, Frost-Smith Advg., 64 Finsbury Pavement, London, E.C.2. C 5125

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SPEARS
(Dept. D.), Watling Street, Shudehill, Manchester.
Phone: Deansgate 7705 (3 lines)
Bankers: Midland Bank, Ltd.

C 438

URGENTLY required for cash, chemist's surplus stocks, bulk or part, particularly toilets, cosmetics, sundries, discontinued manufacturers' lines welcomed. Films, photographic equipment, etc. Write immediately to Box C 2683.

WE WILL PURCHASE for cash a complete stock, a redundant line, including finished or partly finished goods, packing raw materials, etc. No quantity too large. Our representative will call anywhere. Write or telephone:— Lawrenee Edwards & Co., Ltd., 6/7 Wellington Close, Ledbury Road, London, W.11. Tel.: Bayswater 4020 and 7692. C 140

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The above photograph is one of a series being used in our 1960 Advertising, telling your customers how essential BAND-AID Dressings are, whether at home, on outings or on holiday.

* **BAND-AID** is the registered Trade Mark of Johnson & Johnson